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Member of the Filson Club.

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FILSON CLUB PUBLICATIONS No. 26

THE KENTUCKY MOUNTAINS

Transportation and Commerce 1750 to 1911

A Study

In the Economic History of a Coal Field

BY

MARY VERHOEFF

Member of The Filson Club

VOLUME I

Illustrated

LOUISVILLE, KENTUCKY
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In Loving Memory of
My Father
Herman Verhoeff

FOREWORD

IT affords me much pleasure to write this brief introduction to Miss Verhoeff's contribution to the records of the Filson Club, both for the historical and the literary merit of her work. The publication is of special interest to the Filson Club, in that with the exception of a short article by Mrs. Clay on The Genealogy of the Clay Family this is the first volume from the pen of a woman during the twenty-seven years of the Club's existence.

The subject is one which never, until now, has been presented in a manner so nearly commensurate with its merits. The region has been regarded chiefly as a great wall excluding us from the East, about which less has been known than any other portion of the State, and the historical and other data collected by the writer will be a revelation to many Kentuckians who have thought themselves well acquainted with all sections of the State and with its resources. Within a comparatively few years—since the founding of Middlesborough by English capitalists—there has been much progress in the development of the southern portion. To-day, railroad magnates are building a network of railroads from the Big Sandy Valley southward, and the Louisville & Nashville is extending up the Poor Fork of the Cumberland River and up the Kentucky River toward Pound Gap. Here a tunnel will

soon be built through the mountain barrier, which will connect with railroads on the east side and afford the shortest and most direct route to the Atlantic coast. These lines will lead to the development of one of the most extensive coal fields in the United States, containing almost twelve thousand square miles and rich in every variety of coal except anthracite.

The publication comes, therefore, at a time when this region is entering upon a new phase of social and economic development, and all citizens, especially State legislators and educators, should be familiar with the facts so clearly set forth. The first part gives a full description of this elevated section of the State, and embodies much information inaccessible to the casual observer or student. The second part relates chiefly to mountain roads, with citations of the legislative enactments looking to their construction, and from which the reader will learn with surprise how little of actual construction or maintenance has resulted therefrom. The book stands upon its own merit, and will receive from the intelligent reader the praise which it deserves.

J. Stoddard Johnston,
Vice-President of the Filson Club.

PREFACE

THE history of the Southern Appalachian coal field is yet to be written, and data for the work are exceptionally lacking. For that part of the field which lies within Eastern Kentucky there is, from an economic standpoint, an abundance of material to be found in the early State Journals and in the State reports of Internal Improvement and of Geological Surveys. But these records are scattered through many volumes and are nowhere complete. The Library of the State at Frankfort, of Congress in Washington, and of Colonel Reuben T. Durrett in Louisville, afford the best opportunity for research. The records of the United States War Department, some of which exist only in manuscript form, are also valuable. The material is being constantly increased by annual State and Federal reports.

This study, based on such primary sources, will it is hoped throw considerable light on the economic development of the mountain region of Kentucky, and serve as a basis of further investigation.

I wish to express my indebtedness to Colonel Reuben T. Durrett, the honored and beloved President of The Filson Club, for many courtesies extended to me; to Colonel

J. Stoddard Johnston, for the examination and criticism of the manuscript, and to my sister, Carolyn Verhoeff, for valuable assistance in the preparation of the manuscript. I am also under obligations to Professor Franklin H. Giddings of Columbia University, whose "Inductive Sociology" has been most useful in the collection and arrangement of data.

Various librarians have made the work possible, particularly Mr. Frank Kavanaugh, State Librarian at Frankfort. I have received much information from Senator J. Bosworth, from the editors of "Thousandsticks" and of the "Harlan Enterprise," and from Miss May Stone and Miss Katherine Pettitt.

MARY VERHOEFF.

Louisville, Kentucky.
July 10, 1911.

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THE KENTUCKY MOUNTAINS

TRANSPORTATION AND COMMERCE
1750 TO 1911

VOLUME I

THE KENTUCKY MOUNTAINS

TRANSPORTATION AND COMMERCE
1750 TO 1911

Introduction—Extent, Boundaries, and Geographical Relations of the Coal Field

Appalachian Province.

THE Appalachian Province, of which Eastern Kentucky forms a part, is a dome-shaped elevation which extends in a northeast-southwest direction from Central New York to Southern Alabama. It is limited on the east by the Atlantic coastal plain, on the south by the Gulf coastal plain, and on the west by the Mississippi lowlands. Throughout its length, the province is made up of three physiographic divisions: 1, the Eastern, comprising (a) the Appalachian Mountains, a system of many ridges[a] separated by plateau-like valleys; (b) the Piedmont Plain, an elevated belt along the eastern base of the mountain chain: 2, the Central, a lowland belt, known as the "Great Valley," lying between the mountains and a western plateau, and consisting of a series of deep lengthwise valleys[b] which are parallel with themselves and with the borders of the belt,

Its Physiographic Divisions.

[a] Known locally as the South Mountain of Pennsylvania, the Blue Ridge and Catoctin Mountain of Maryland and Virginia, the Great Smoky Mountains of Tennessee and North Carolina, and the Cohutta Mountains of Georgia. (U. S. Geological Survey, Geologic Atlas, Morristown Folio, Folio 27, 1896.)

[b] The Coosa Valley of Georgia and Alabama, the Great Valley of East Tennessee and Virginia, the Shenandoah Valley of Virginia, the Cumberland Valley of Maryland and Pennsylvania, and the Lebanon Valley of Northeastern Pennsylvania. (*Ibid.*)

and which are separated by narrow ridges: 3, the Western, embracing (a) a plateau belt, known in Kentucky and Tennessee as the Cumberland Plateau, with an eastern escarpment facing the Appalachian Valley and for the most part regular, and a western escarpment deeply dissected and sinuous; (b) the interior lowlands, which include the lower rolling country of Kentucky, Ohio, and Tennessee.

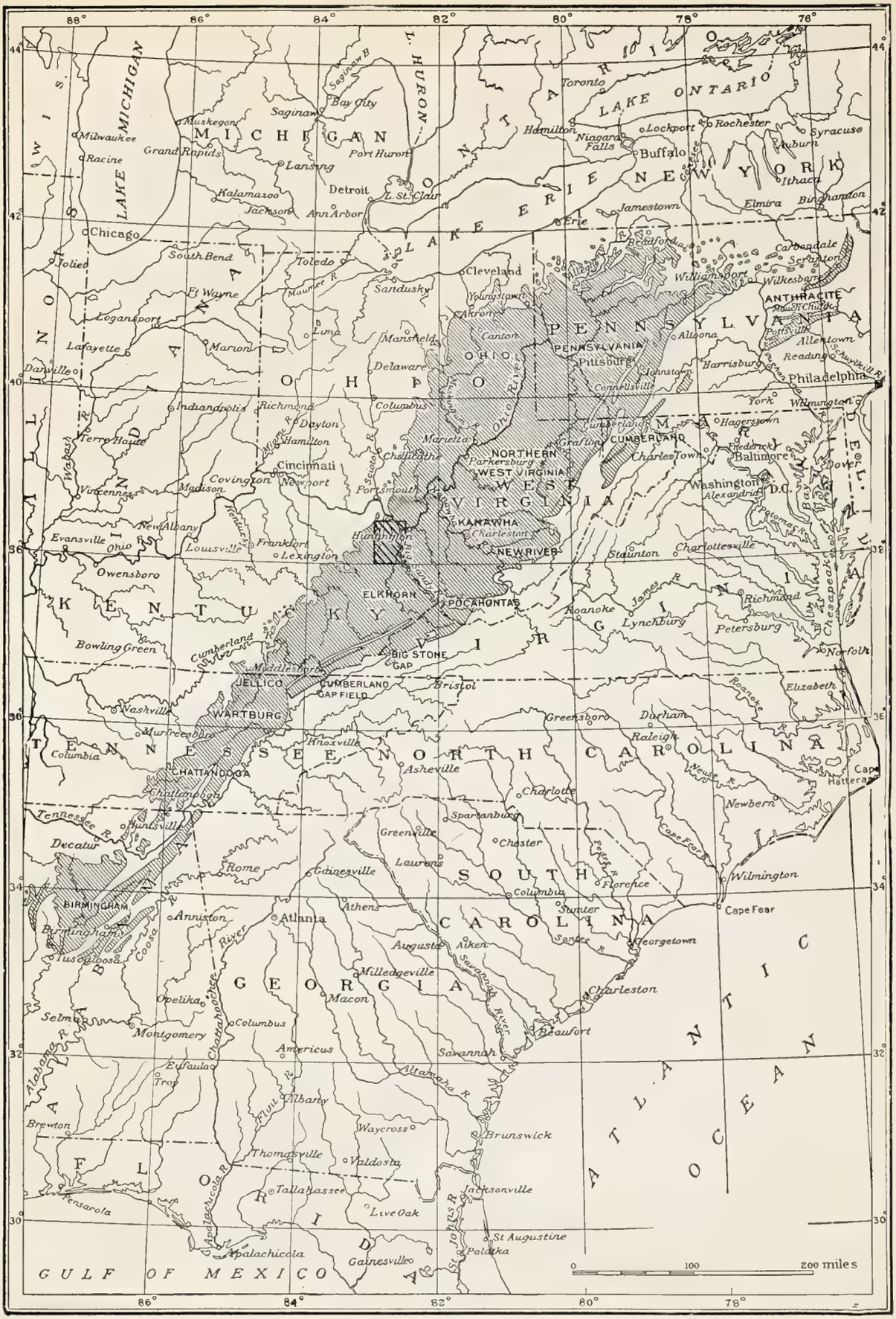
Appalachian Mountains; their composition.

The Appalachian Mountains are, for the most part, composed of igneous and metamorphic rock belonging to the Archæan age and to an age unknown, but the divisions to the west are made up of sedimentary deposits more recent in origin, some of which contain coal seams. Dissection both to the east and the west, however, has worn away the coal-bearing rocks, so that the plateau belt, from northern Pennsylvania southward, rises as a coal field[a] above non-coal-bearing lowlands. With a total area of approximately 70,800 square miles, this field, 850 miles in length, is included within the limits of nine different States: Kentucky, Tennessee, Georgia, Alabama, Virginia, West Virginia, Ohio, Maryland, and Pennsylvania.[1] It is one

The plateau belt the "Appalachian Coal Field."

[a] The coal fields of the United States are classified as anthracite and bituminous, for convenience in description and because of certain differences in the physical and chemical qualities of the coal. The anthracite deposits are confined almost exclusively to some 484 square miles of ridge land in Eastern Pennsylvania. The bituminous deposits are widely distributed, from the Atlantic to the Pacific, in a number of well-defined basins which contain various grades of coal from semi-anthracite to lignite, representing the stages in the formation of the mineral. Of these basins the Appalachian field ranks first not only in the character and quantity of its coal but in the magnitude of its production.

(See map showing the coal fields of the United States, issued by the U. S. Geological Survey, with an explanation of the map by Marius R. Campbell. 1908.)



THE APPALACHIAN COAL FIELD.

U. S. Geological Survey.

hundred and eighty miles wide in the northern extremity, tapers gradually toward the southwest to fifty miles on the Kentucky-Tennessee border to less than twenty miles in Tennessee, and then expands to about eighty miles at the southern extremity.[a]

Area of Kentucky.

Kentucky has an area of 40,400 square miles. The territory west of the Tennessee River, or about six and a half per cent, is a portion of the Mississippi lowlands. This tract, known as the "Jackson Purchase," is everywhere less than five hundred feet above sea level.[2] The remainder of the State is within the Appalachian Province, which is described as follows by the United States Geological Survey: "From its extreme altitude on the southeastern margin the surface descends to less than five hundred feet on the western border. . . . This descent is not regular, but is accomplished by a number of steps or escarpments, which mark the present extent of particularly hard beds and also the stages in the erosion of the surface to its present position. The highest and most pronounced escarpment is along the western margin of the Appalachian coal field, separating in Kentucky the great interior plain from the higher and more hilly region of the coal field."[3]

Except for the "Jackson Purchase" within the Appalachian Province.

Surface made up of Platforms.

The steps or platforms have been grouped[4] as:

Interior Lowlands; Alluvial Tracts.

(1) The interior lowlands, consisting of (a) alluvial tracts. The streams from mouth to headwaters are bordered by level land known as "bottoms," varying in width from a few yards to miles. It is on these flood plains,

[a] See map.

below which, in certain localities, the streams have cut deep channels, that some of the most important cities are situated, as for example Louisville on the Ohio River and Frankfort on the Kentucky River. (b) The Bluegrass region. This division, with an area of about 8,186[a] square miles and a general altitude of from eight hundred to one thousand feet above sea level, forms the north-central section of the State, which, with a surface gently rolling and a soil exceedingly fertile, has long been noted for its agricultural wealth and general prosperity. That portion of about 1,062 square miles in the vicinity of Lexington, where the soil, derived from phosphatic limestone, is especially productive, is the typical Bluegrass country. (c) The Central plateau. Surrounding the Bluegrass section is a plateau the margin of which is marked by a series of conical hills. These isolated outliers, with an area of about 5,609 square miles, have in general thin and unproductive soils suited only to fruit culture. The plateau proper, covering 8,882 square miles, presents a steep escarpment, known as "Muldraugh's Hill," toward the Bluegrass region. The surface for the most part is rolling, but is often broken and covered with sinks caused by underground channels which, carrying off the drainage, lessen the agricultural value. Since, however, it is capped with a limestone soil, this section ranks second in fertility. (d) The Western coal field. To the north and west of the plateau and terminating along

The Bluegrass Region.

The Central Plateau.

The Western Coal Field.

[a] The figures, except for the coal fields, are rough computations from the geological maps published by the State Geological Survey in 1891 and 1907.

the Ohio River is a coal-bearing region with an area[5] of about 5,800[a] square miles and an average elevation of from eight hundred to four hundred feet. This is the southern extension of the Indiana-Illinois coal field.

The Cumberland Plateau, Eastern Coal Field, or "Mountains."

(2) The Cumberland Plateau. This is the Eastern coal field, with an area[6] of about 11,180[b] square miles. Rising above the central lowlands, it is known locally as "the mountains." The field comprises all of the State east of an irregular line from a point opposite Portsmouth on the Ohio river to the Wayne-Clinton county line on the Tennessee border, intersecting the meridian 83° on the north and 85° on the south. The meridian 82° touches the eastern margin of the field. The parallels 36° 30′ and 39° 6′ are approximate boundaries.[7]

Political Boundaries.

The political boundaries of the field coincide with those of the State.[c] On the north, the bed of the Ohio River at low water, from the mouth of the Big Sandy, separates

[a] Six thousand four hundred square miles, according to the U. S. Geological Survey, Mineral Resources, 1907, p. 133; 4,500 square miles, according to State Inspector of Mines. (See Annual Report, 1901–1902, p. 305.)

[b] Ten thousand two hundred and seventy square miles, according to Mineral Resources, 1907, p. 133.

[c] The eastern line until 1799, when it was established as the State boundary, was vaguely defined. The northern boundary was established by an act of Virginia in 1784 ceding the Northwest Territory to the General Government. The southern line was run by Walker and Henderson in 1780, who were directed by Virginia and North Carolina to follow the parallel 36° 30′. The line, because of error in measurements, runs north of the required boundary, about seven miles at Cumberland Gap and twelve miles at the Tennessee River. The Walker line was ratified by act of the Kentucky Legislature approved February 11, 1820. There was for many years an interstate dispute concerning the boundary, and up to the present time land between the two lines is subject to entry in the land office at Frankfort, although under the jurisdiction of Tennessee. (Kentucky Bureau of Agriculture, 14th Biennial Report, pp. 2–3.)

Ohio. On the south a portion of the "Walker line" (a straight line from Cumberland Gap to the Tennessee River) separates Tennessee. On the east (1) the crest of the watershed from Cumberland Gap to Russell Fork of the Big Sandy, lying between Powell River (a tributary of the Tennessee) and the Poor Fork of the Cumberland, and between Pound Fork and Elkhorn Creek of the Big Sandy, separates Virginia; (2) a straight line from Russell Fork, north 45° east to Tug Fork of the Big Sandy, separates West Virginia; (3) Tug Fork and the Big Sandy (middle of stream) to the Ohio, a distance of one hundred and twenty miles, also separates West Virginia.[8]

Counties grouped by River Basins: date of their formation.

The thirty-four counties which are wholly or partially within these boundaries[a] vary in size[9] from 760 square miles (Pike) to 175 square miles (Boyd). These are, grouped[b] according to river basins and given with date[10] of formation, as follows: the Little Sandy basin—Greenup 1803, Carter 1838, Elliott 1869; the Big Sandy basin—Floyd 1799, Pike 1821, Lawrence 1821, Johnson 1843, Boyd 1860, Martin 1870; the Kentucky basin—Clay 1806, Estill 1808, Perry 1821, Breathitt 1839, Owsley 1843, Letcher 1842, Powell 1852, Wolfe 1860, Lee 1870, Leslie 1878, Knott 1884; the Cumberland basin—Pulaski 1798, Knox 1799, Wayne 1800, Rock-

[a] In counties along the western margin the plateau is represented by limited areas in the form of spurs and knobs. In places these outliers are detached from the plateau and stand as islands above surrounding lowlands. Such counties contain little coal, and the greater portion of their surface belongs to the central lowlands. This is especially true of Wayne, Clinton, and Rowan counties; Madison County also contains a few detached outliers.

[b] This grouping is only approximately correct.

castle 1810, Whitley 1818, Harlan 1819, Laurel 1825, Clinton 1835, Jackson 1858, Bell 1867; the Licking basin—Morgan 1822, Rowan 1856, Magoffin 1860, Menefee 1869.

Counties Dissociated from Central Kentucky.

The county unit was formerly much larger than at present. Included at different times, within the limits of Orange (1734), Augusta (1738), and Bottecourt (1769) counties, all of Kentucky, from 1772 until the close of 1776, was a portion of Fincastle County, Virginia. December 31, 1776, Kentucky County was formed, and as population increased this was gradually subdivided into nine counties. As a result, when Kentucky became a State in 1792 this mountain section was the outlying eastern extremity of four

[a] Each Virginia county was a civil and military corporation entitled to a separate court, to justices of the peace, surveyors, a sheriff, constable, coroner, and militia officers. (Marshall, History of Kentucky, pp. 47–48.)

"Each county raised a certain number of troops, and because it was not convenient for the men to go many miles from home in assembling for purposes of drill, the county was subdivided into military districts, each with its company, according to rules laid down by the governor. The military command in each county was vested in the county lieutenant, an officer answering in many respects to the lord lieutenant of the English shire at that period. Usually he was a member of the governor's council, and as such exercised sundry judicial functions. He bore the honorary title of colonel, and was to some extent regarded as the governor's deputy; but in later times his duties were confined entirely to military matters." (Fiske, Civil Government in the United States, p. 64.)

Originally "the county court usually met as often as once a month in some convenient spot answering to the shire town of England or New England. More often than not the place originally consisted of the court house and very little else, and was named accordingly from the name of the county." (*Ibid*, p. 62.)

This county system was continued in Kentucky, and the small "shire" towns that have grown up retained for many years the county name (see pp. 128, 162) prefixed to "Court House." In the case of Harlan the name has continued to the present time, the latter phrase being omitted.

"Court day," which was formerly a holiday in Kentucky as in Virginia, when the residents of the county met upon the court-house green to trade, discuss public affairs, etc., has as society has grown more complicated lost its importance, except in the mountains, where it still retains much of its original significance, especially in the fall, when the roads are in the best condition.

counties[9]—Lincoln, formed in 1780, Bourbon and Madison, formed in 1785, and Mason, formed in 1788; their seats of government being situated in the Bluegrass country.[11] By 1800 the district was included within Fleming, Pulaski, Floyd, and Knox counties. After that year the subdivision went on rapidly: Mitchell's map of Kentucky for 1834 shows some nineteen counties. Between 1850 and 1870 there was a gradual dissociation of the region from the central section of the State. Since 1870 the counties of this district, with the exception of a few along the western border, have been included within its own limits.

Topography

Region the Drainage Basin of Five Rivers.

The Cumberland Plateau has been dissected into a series of narrow winding valleys, separated by steep watersheds, which form five distinct drainage basins with a general southeast to northwest trend. Here it is that the head-streams of the rivers—the Licking, the Big and the Little Sandy, the Cumberland and the Kentucky—take their rise. Originating in the southeast, in the vicinity of Pound Gap, as mere rivulets, these rivers as they flow westward are swelled in volume until, becoming master streams along the margin of the plateau, they finally reach the Ohio. In the north several small creeks, such as Hood and Tygarts, are directly tributary to the Ohio, but with the exception of these, all of the streams are a part of one of the main basins. The region is thus covered by a complex

Rivers rise near Pound Gap, finally reaching the Ohio.

network of repeatedly branching forks and creeks, heading against one another in cols and wind-gaps along the crests of the ridges.[12]

Innumerable Creeks and Branches.

To the southeast there is a linear arrangement of the ridges. The Cumberland Mountain, a narrow straight divide between the Cumberland and Tennessee rivers, entering from Tennessee extends in a northeasterly direction thirty-five miles to the neighborhood of Cranks Gap, where it leaves Kentucky and continues as Stone Mountain to Guest River in Virginia. The general elevation varies from 2,500 feet (Pinnacle) to 3,451 feet (White Rock). The gentlest slope is on the northwestern or Kentucky side, where the ridge rises from 1,000 to 1,400 feet above the local drainage. On the northeastern or Virginia side is a steep escarpment with overhanging cliffs, rising 900 to 2,000 feet above the adjacent valley of Powell's River. The crest of the mountain throughout its extent is markedly level, except where it is depressed by a number of wind-gaps—for example, Britton, Brierfield, Chadwell, Gibson, and Cumberland. None of these are more than 300 feet deep except Cumberland Gap, on the Tennessee-Virginia line, which is 864 feet deep and 1,636 feet above sea level. Streams[a] head along the slopes, but nowhere cut through.[13]

Ridges.

Cumberland Mountain.

[a] There are, however, a number of water-gaps in the Cumberland-Stone Mountain—Big Stone Gap and Pennington Gap, Virginia, and Big Creek Gap and Bruce's Gap, Tennessee. Cumberland Gap was probably a water-gap in a not very remote geological time, occupied by a branch of the Cumberland River, now a tributary of the Clinch River. (U. S. Geological Survey, Bulletin 111.)

The Kentucky Mountains

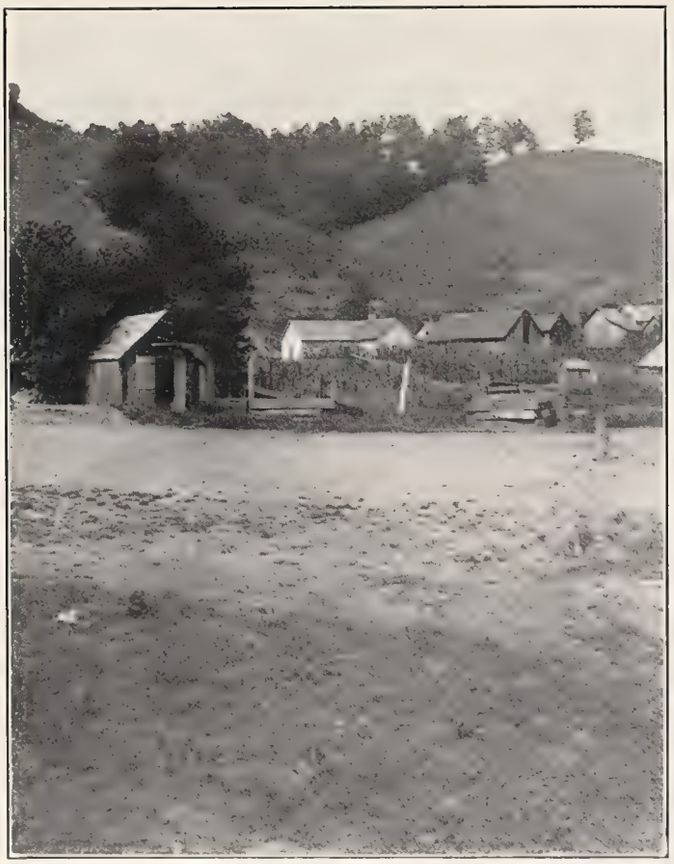
Pine Mountain.

From ten to twelve miles west of Cumberland Mountain and parallel to it is Pine Mountain[a], which extends 110 miles through Kentucky, terminating in the Big Sandy Valley. This ridge is likewise narrow and even-topped, but the elevation is less than that of the Cumberland. Averaging 2,500 feet, the altitude increases from 1,500–2,000 feet at the Kentucky-Tennessee line to 3,000 feet in the central portion, and decreases again to 1,500 feet in the northern part of Pike County. In contrast to the Cumberland the gentlest slope is on the southeast, and the steep escarpment on the west. There is only one wind-gap of any depth—Pound Gap, 600 feet below the crest and 2,400 feet above sea level. Streams, however, break through in narrow gorges at three points. Near the State line in Bell County the gap is 1,000 feet and the crest 1,500–2,000 feet above sea level; at Pineville the gap is 980 feet and the crest 2,000 feet; at the Breaks of the Sandy, in the northern extremity, the gap is 900 feet and the crest 1,500–2,000 feet.[14]

Black Mountain Region.

Between these two parallel elevations is the Black Mountain region, a mass of zigzag ridges with spurs and outliers projecting in all directions. The altitude, about 300 feet greater than that of the Cumberland, averages 3,500 feet, increasing from 3,000 feet along the Kentucky-

[a] The total length of the Cumberland-Stone Mountain is approximately 120 miles. About forty miles are in Tennessee, where the ridge terminates in the vicinity of Jacksboro. Pine Mountain has a total length of about 130 miles, terminating near Elk Gap, Tennessee.



KNOB-LIKE HILLS CAPPING RIDGES NEAR CANNEL CITY, MORGAN COUNTY.

U. S. Forest Bureau.

(See page 11.)

Tennessee line to 4,100 feet on the Kentucky-Virginia line. Above the local valley drainage the average elevation is 1,000–2,000 feet. Below Yellow Creek these ridges are known as the Log Mountains, and above as the Little and Big Black mountains.[15]

Ridges west of Pine Mountain.

West of Pine Mountain the ridges, like those of the Black Mountain region, extend irregularly in every direction, and are in general nameless. The altitude gradually decreases westward to 1,200–1,500 feet along the western margin and to 600 feet along the Ohio River, averaging 200–700 feet above the local drainage. The numerous cols and wind-gaps are nowhere of great depth. The crests, which as a rule are barely wide enough for a trail, occasionally assume a rounded or knob-like form, and in some places broaden to mesa-like flats. Thus in the interior, as in the upper Kentucky basin,[16] there are divides more than a mile wide, while along the western margin broad and flat summits are numerous.

Valleys.

The valley topography is of two types: (1) Narrow canyons, enclosing little or no bottom land, with walls rising abruptly from the stream beds, and usually capped with massive overhanging cliffs. This is the "cliff and gorge" type. In general it is limited to sections known as the "narrows," where the valley widens both above and below the contracted portion, but in places it is the characteristic topography of an entire creek valley. An extensive belt of constricted valleys is found along the western

Cliff and gorge type.

margin of the field, where the main streams for from fifteen to twenty miles are enclosed by perpendicular bluffs hundreds of feet high.[17] The lateral valleys, heading as they often do abruptly against steep cliffs, are for miles walled in on all sides.[a] (2) V-shaped depressions, where the sides recede gradually from the streams. This type is the more common. Terraces or benches, generally narrow but in some places extensive, occur at varying altitudes from foot to brow of the hills. The streams approach the two lines of hills alternately, wash and excavate the bases, and deposit alluvium on the opposite shore. Hence bottom land lies first on one side and then on the other of the streams and affords a considerable level surface. The average elevation of the bottoms above low water is forty to fifty feet, varying, however, to twenty and twenty-five feet and even less. As a rule the width of the bottoms is greatest at the mouths of the streams, decreasing toward headwaters.

Broader depressions.

Terraces.

Bottoms.

Middlesboro Basin.

In some localities the valleys are broad and open, with extensive areas of level land. This is especially marked in the upper Cumberland basin, which is referred to in the following description: "The topography of the basin around

[a] Numerous Red River tributaries of the Kentucky basin are examples of this type, as may be seen from the following description: "Some of the walled sides of the Little South Fork (of Red River) are said to be impracticable for seven miles, where it is walled in nearly perpendicularly to a height of 200 to 300 feet without a break. . . . The head of the Hotel branch (of Graining Block Creek) terminates abruptly against a cliff 250 feet high, the chasm being almost the same width." (Kentucky Geological Survey, Vol. IV, p. 531. 1861.)

TERRACES OR BENCHES

In valley of Martin's Fork near junction of Poor Fork of Cumberland River. A road runs on top of bench, on which farm buildings stand.

U. S. Geological Survey.

Middlesboro is unlike that in any other part. The salient features of the surface there are an open basin, a broad, nearly level plain, and a series of low hills. The basin is approximately circular, being about four miles long from east to west and about three and a half miles wide from north to south, and on the 1,300-foot contour has an area of about ten or twelve square miles. . . . This basin . . . is surrounded on every side by mountains that rise from 1,000 to 2,000 feet above its level. About one-half the basin is occupied by a broad, irregular, nearly level plain. Across this plain Yellow and Little Yellow creeks meander sluggishly."[18]

Skidmore's Bottom.

There is an open valley at Skidmore's Bottom on Martins Fork above Harlan. "This, however, has an area of probably less than one-half square mile, or less than one-twentieth of the area of the Middlesboro basin."[19]

Coves.

The heads of the valleys along the side of the ridges often take the form of rounded recesses, surrounded by high cliffs, known as "coves." Wallens Creek, of the upper Cumberland, furnishes an example. "The main creek as well as its tributaries head in amphitheater-like valleys, which are shaped like an inverted half cone with an angle of slope of about 45°."[20]

Economic Geology

A type geological column of the State of Kentucky shows superficial unconsolidated deposits of comparatively

Paleozoic Type Column of Kentucky.

recent origin, underlaid with Paleozoic strata from the Carboniferous to the Ordovician periods inclusive.

The Paleozoic type column[a] is as follows:[21]

CARBONIFEROUS.
1. Pennsylvanian System, including Pottsville formations.
   a. The Upper Coal Measures; sandstones and shales containing coal seams, and occasional limestones.
   d. Conglomerate Coal Measures (Lee and Næse formations), massive sandstones and conglomerates separated by shales containing coal seams.
2. Subcarboniferous (Mississippian).
   a. Limestones, shales, and sandstones (Chester Group, Mauch Chunk shales).
   b. Limestones (Newman, St. Louis).
   c. Sandstones and shales (Waverly Group, knob stones).

DEVONIAN.
1. Black shale (Chattanooga).
2. Limestones, often marked in upper portion by irregular masses of flint (Corniferous Group).

SILURIAN.
1. Limestone (Greenfield).
2. Limestone, shales, and clays.
   a. Crab Orchard clays.
   b. Brassfield limestones (Clinton).

ORDOVICIAN (Lower Silurian).
1. Limestones and shales with occasional sandstones. (Hudson Group, Cincinnati Series).
2. Limestones (Jessamine Series).
   a. Lexington formation (formerly Trenton Group).
   b. High Bridge formation (Bird's-Eye and Chazy).
3. Dark limestones and dolomite (Knox dolomite).
4. Limestone—porous, white, sandy.

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[a] The strata have not as yet been correlated over extensive areas beneath the drainage, and as investigation progresses this grouping will probably be altered in minor details. The topographical divisions (pp. 3–5) define in a general way the limits of the rock exposures. The lowest strata are exposed along the axis of an anticlinal arch in the vicinity of Lexington (see note, page 17), and from this as a center the formations outcrop on both sides of the crest in belts approximately parallel to the length of the fold, and thus form concentric bands of rocks which decrease in geologic age both to the east and west. The oldest rocks of the State, the Ordovician and Silurian formations, cap the central area, the Bluegrass section. The knobs and hills of the central plateau are capped with the Devonian and Waverly formations, the central plateau itself with the Subcarboniferous limestones, the coal fields with the Carboniferous. In the Jackson Purchase region the rocks are for the most part unconsolidated sands,

UPPER WALLINS CREEK VALLEY.

View down Wallins Creek from just above the mouth of Long Branch, which shows the beginning of the bottom lands and about the highest point to which a road or a switch can be built without heavy grades.

LOWER WALLINS CREEK VALLEY.

The valley here is wide and fertile. The Cumberland Valley, with Pine Mountain rising behind, shows in the distance.

Physiography of a Creek Valley, showing the decrease of Bottom Land toward headwater.

U. S. Geological Survey.

Transportation and Commerce

Geological Formations of the Cumberland Plateau.

The Cumberland Plateau is composed of coal-bearing Carboniferous rock, capped with clays, sands, and gravel, and underlaid with the older formations, which come to the surface in but three localities. Along the western margin, on the northwest face of Pine Mountain and on the southeast face of the Cumberland Mountain, the column, from the Carboniferous through the Devonian, is exposed in the escarpments. A comparison of the strata in these escarpments shows a distinct thickening of the deposits toward the southeast, and the indications are that the

Exposures in Escarpments.

gravels, and clays, ranging in age from Cretaceous to recent marine deposits, formed beneath the waters of the Gulf when it extended into Southern Illinois, covering the Paleozoic strata (see map).

The coal field does not lie within the glacial boundary (see U. S. Geological Survey, Professional Paper No. 13, 1903), but there are deposits within the area which are considered of Pleistocene age—for example, the sand, gravel, quartz, and chert boulders covering the hills back of Ashland, Boyd County, and extending up the Little and Big Sandy valleys at some distance above the present flood plains. These are thought to be residual material from the crystalline rocks of the Blue Ridge deposited by an ancient stream, the preglacial Teays River, which long ago ceased to flow through these valleys. (U. S. Geological Survey, Bulletin 359, pp. 14–15. For full discussion see Professional Paper No. 13.) Unconsolidated deposits are also found in other localities. The Irvine formation, capping the river hills in the vicinity of Irvine, Estill County, also in Powell and in a number of Central Kentucky counties, has been considered by some geologists to be of Glacial age. Later investigators, however, refer these deposits to the Neocene, the upper half of the Tertiary. (U. S. Geologic Atlas, folio 46. Kentucky Geological Survey, Bulletin No. 7, pp. 11–25.)

In Elliott and Carter counties there is an exposure of igneous rock in the form of a dike. This rock (peridotite) is of unusual interest, since it is one of the two igneous exposures known in the State, and because of a resemblance to the peridotite mother rock of the diamond in South Africa. Reported finds of diamonds have not been substantiated, but there is no certainty of their non-existence. Small garnets—none of gem quality—are found here. (U. S. Geological Survey, Bulletin 349.) For a full discussion of the formation see Kentucky Geological Survey, Geology of Elliott County; American Journal of Science, August, 1886, article by J. S. Diller; U. S. Geological Survey, 1905, Production of Precious Stones, by G. F. Kunz.

maximum thickness of the column is attained in the Black Mountain region.[22]

Rocks Homogeneous.

Throughout the Plateau the rocks are nearly equal in their resistance to degradation and weathering, and therefore cause but slight contrasts in the topography. The Conglomerate sandstone at the base of the coal measures is the most resistant, and since it outcrops in narrow strips along the flanks of the escarpments just referred to, and there weathers into massive cliffs, it marks these sections as belts of topography rough in the extreme.[a]

Conglomerate Sandstone the most Resistant.

Rock Structure.

In general the rocks have an approximately horizontal position. Deviation from the horizontal, however, is

[a] In these belts the towering Conglomerate suggests castles and fortifications, and has given the name "Rockcastle" to a county and to numerous streams (see note c, p. 62). In places streams heading against each other in the ridges have met in the soft shales underlying the Conglomerate formation, which remains as a natural bridge. (Kentucky Bureau of Agriculture, 14th Annual Report, p. 8.) "This kind of sandstone (Conglomerate) forms precipitous ledges of rock, which frequently overhang their bases along almost the whole of the western edge of the coal formations of Kentucky. . . . The rock crumbles away below . . . and grottoes of greater or less extent are formed. Some have been seen from one to three hundred feet in length and with rock overhanging from ten to forty feet. . . . These grottoes are commonly called rock-houses. They afford a fine retreat for wild and domestic animals during storms, and not unfrequently the traveler makes his camp in them." (Mather's Geological Report, Kentucky Senate Journal, App. 1838–1839, p. 280.)

Rock-houses and cliffs are characteristic also of a number of upper coal measure sandstones, but are neither so numerous nor of so great extent. A member of the Subcarboniferous limestone in the three escarpments, on account of its solubility, gives rise to caves, sinks, and underground channels. A few of the smaller streams flow for some distance in such channels, and are usually designated "sinking creeks." Some of the caverns are extensive and afford a passageway through ridges; in Rockcastle County carts and wagons have passed thus from one side of a ridge to the other without difficulty. (Collins, History of Kentucky, Vol. II, p. 691.)

See Walker's Journal for a description in 1750 of a cave in the Cumberland Mountains near Cumberland Gap. (Filson Club Publications No. 13, p. 49.) It was probably this cave which gave to Cumberland Gap its original name of "Cave Gap."

frequent. This is due to faults and folds resulting from earth movements. The most pronounced disturbance occurred along the Pine and Cumberland mountains, where rocks are sharply upturned at angles varying from 20° to 90°, and along the western margin, where the rocks are tilted[a] slightly to the southeast.[23]

Natural Resources

Resources derived from Geological Formations.

Since the greater part of the rock is friable and disintegrates readily, it has small economic value, yet the principal natural resources of the region are derived directly

[a] An anticlinal fold (Cincinnati arch), the axis of which enters Kentucky from Ohio, extends through Lexington and southward. The upper rocks of the fold have been worn away in Central Kentucky, leaving in relief the western edge of the coal field, the rocks of which, lying on the eastern flank of the fold, are therefore tilted. The Black Mountain region is a syncline, or flat-bottomed trough, from twelve to fifteen miles wide, extending from the heads of Poor and Clover forks of Cumberland River to Fork Mountain in Tennessee. The rocks of Black and Log mountains have a slight dip, averaging one hundred feet per mile, in both directions from the axis, which where traced runs a little east of Cumberland River. The northwestern edge of the syncline, which was originally an anticlinal fold, Pine Mountain monocline, broke, and the southern limb, now forming Pine Mountain, was thrust upon the nearly horizontal rocks to the west. "The average dislocation, by the upthrow of the whole series of rocks, to an unknown depth along the fault line, is about 3,000 feet." (Kentucky Mines, Rep. 15, p. 8. 1901–1902.) This fault has been traced as far as the Breaks of the Sandy, beyond which point the unbroken anticline extends into West Virginia. To the east of the Black Mountain region an anticlinal arch originally extended nearly to the Holston River. The eastern portion has been dissected, leaving Cumberland Mountain, the western limb, in relief. (U. S. Geologic Atlas, Estillville Folio.)

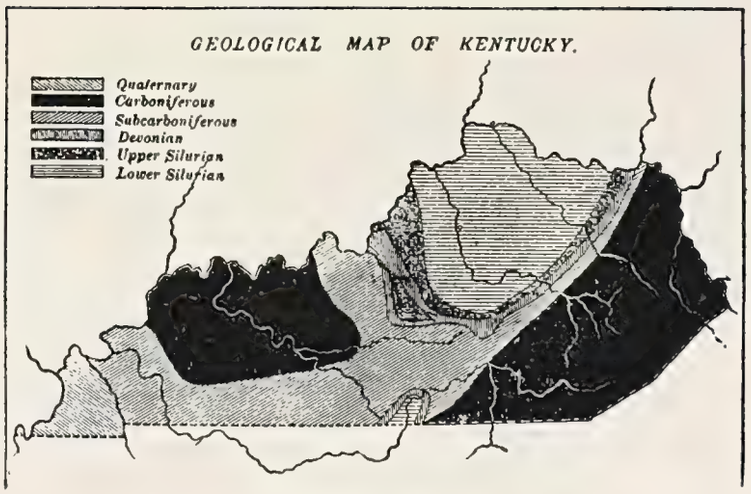
"The factors controlling the physiography of this province (Appalachian) are varying hardness of the rocks, the arched structure, and a series of broad earth movements. The different physiographic divisions are composed of rocks of various degrees of hardness. . . . The . . . . province represents the northwestern limb of a high arch into which the rocks of the eastern United States were thrown by mountain-making forces. In the center of this arch the rocks are closely folded, and the last of them are seen in Cumberland and Pine mountains. This arch and the minor folding has determined the position

Soils.

therefrom.[a] The soils are composed of the decay from the underlying rock, enriched by vegetable mold, and vary in composition with the source of the waste. Shaler, referring to the Carboniferous belts in the State, makes these statements: "The soils are exceedingly variable in character, but are generally a sandy loam. On the Conglomerate or lowermost part of the coal-measures the soils are usually the poorest—about the only really infertile soils of the State being the small strips . . . formed on this rock. These strips are usually very narrow. The remainder of the Carboniferous area is composed of fairly

and elevation of the rocks, and thus their exposure to erosion. A third factor has been the series of broad earth movements by which the province was elevated at different times after it had been planed down by erosion to a more or less even surface, or peneplain. Three such levels of erosion have been recognized by Hayes and Campbell in the southern Appalachians. Of these only the oldest and highest is represented in the Cumberland Gap coal field. This peneplain, of which the Cumberland Plateau of Tennessee is a remnant, is thought to have been of late Cretaceous age. It was first called the Schooley peneplain, from Schooley Mountain, New Jersey, and in Tennessee and Kentucky it has been termed the Cumberland peneplain. Below it another erosion level has been developed, which Mr. Campbell, in the London folio, called the Lexington peneplain. North of Pine Mountain all the hilltops lie in the same plane and thus in a limited area rise to about the same elevation. Forty miles north of Pine Mountain they are about 1,500 feet above tide; to the south the elevation gradually increases. . . . The plane of the hilltops passes just above Pine Mountain, but apparently not above the Black Mountains. Evidently, then, the tops of the Black Mountain ridges and part at least of Cumberland Mountain remained above the Cumberland peneplain as unreduced residuals. No physiographic traces of the Cumberland peneplain were detected in the Black Mountains. From any point in the Log Mountains or Black Mountains one hundred feet above the summit of Pine Mountain, where an extensive view northward can be obtained, the line of the horizon is seen to be nearly as level as a plain; Pine Mountain, though now eroded until it has a sharp sawtooth crest, is quite level in general elevation." (U. S. Geological Survey, Professional Paper No. 59, pp. 14–16.)

[a] As a rule the sandstone of the upper coal measures—the most abundant rock in the region—does not cut into blocks of large dimensions even when comparatively durable. It has been utilized locally as a cheap and accessible



(See Note a, page 14.)

fertile light lands, interspersed with areas of great fertility. Some of the best lands of the State are upon the summits of the Carboniferous mountains of Eastern Kentucky; it is safe to say that, wherever the shape of the surface admits of cultivation, the Carboniferous rocks of Kentucky furnish fair soils, adapted to a varied range of crops."[24]

A large proportion of the surface, perhaps fifty per cent, is not well adapted to cultivation because of the topography.[a] Formerly the entire surface was covered with a forest of valuable hardwoods intermixed with

Forest.

material for rough construction purposes, such as culverts for railroads. It has been used also for the building of a few dwellings, and quite generally for fireplaces and chimneys.

On Imlay's map of Kentucky, 1793, is marked "Reputed Silver Mines" at the head of the Kentucky and Big Sandy rivers. According to the Geological Survey: "Considerable time and means having been spent in desultory and unavailing search for silver ore in various localities of this region, as well as elsewhere in this coal field, it is desirable to state that as yet no indication of any deposit of silver ore worth exploitation has ever been discovered in the Appalachian coal fields, and also that no true vein of any kind has been found in the eastern field of the State, excepting the one here described under the caption of iron ore. From these facts, after such investigation in this field as has been made, it may be assumed as reasonably certain that no paying quantity of silver ever will be found in it, though it is beyond dispute that occasional silver-bearing ore has been found in exceedingly small quantities. The rugged Conglomerate cliffs, which have attracted the most search, are not more likely to contain silver than other smoother surfaces. The legends of Swift and his concealed silver mines and treasures, current in the mountains from Pennsylvania to Georgia and North Carolina, may be left to those who wish to believe them. It should be known, however, that the North American Indians had no knowledge of mining or metallurgy." (Kentucky Mines, 1902, Report on Geology of Upper Kentucky River, pp. 112-113.) Legends concerning the silver mines antedate the Revolutionary War and are still current in the Kentucky mountains.

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[a] The fertility of the region is not apparent to the casual observer because of the poor methods of agriculture. Many of the bottoms which have been in cultivation for seventy-five or one hundred years still yield ample crops. A report of the U. S. Geological Survey for 1906 refers to the soils of the upper

conifers, capable of reproduction in kind. Shaler continues: "The considerable part of its surface that is not fit for agriculture is admirably suited for the production of hardwood timber of the most valuable varieties, and will doubtless have in this fitness a source of wealth scarcely less than tillage of the best lands could give."[25]

Coal Seams.

Coal seams occur in all of the thirty-four counties, increasing in number and thickness toward the southeast and reaching their climax in the Black Mountain region. The seams are favorably disposed for extraction except in the Pine and Cumberland mountains, where the contorted condition of the strata renders mining difficult. The deposits are all bituminous, and there are several varieties. The most valuable are: cannel, found in limited basins throughout the field; coking, appearing in large quantities only in the vicinity of Pound Gap (Elkhorn district); high class steaming coals, occurring in quantity in the southeastern counties and at a few points along the western margin.[26]

Iron Ore.

Iron ore, nowhere abundant, is distributed, at a number of geological levels, in different sections of the field. The most important deposits found lie along the western

Cumberland Valley thus: "The hillside soils yield largely if properly cultivated, but as they must lie idle every other year and cultivation must be largely by hand, they can not be considered as desirable farming lands. It is a little surprising to find the soil on a hillslope so steep that it can not be plowed yielding from sixty to eighty bushels of corn to the acre, and continue to give a good yield for twenty or twenty-five years without fertilization if allowed to lie idle every other year."

CONGLOMERATE CLIFFS.

U. S. Geological Survey.

margin, especially in the Kentucky and Licking basins (Red River district) and in the Little Sandy basin (Hanging Rock district).[27]

Salt, Oil, Gas.

The water of many springs contains common salt (NaCL), and in numerous places a richer brine can be obtained by boring. It is found associated with oil and natural gas,[a] which are inearthed in certain localities where the structure and composition of the rocks are favorable to the conservation of hydrocarbons.[28]

Clays.

Clays, plastic and non-plastic, are found in every part of the region, as residuum from the coal measures along the base of the hills, imbedded in the coal measures or as unconsolidated silt in the valleys.[29]

In the past the resources have been merely exploited rather than developed, and if the process is continued it must inevitably lead to their exhaustion. In the case of coal and other minerals the exhaustion is of course only a matter of time in any case, though the end may be postponed by more careful methods. But with the timber it is otherwise. By scientific methods of forestry the region, because of its natural adaptability to the production of hardwoods, might be made a permanent source of wealth. On this account the perpetuation of the forest is of the utmost importance to the mountain people. It is equally

Forest only Permanent Source of Commerce.

Scientific Methods Necessary.

[a] The basins of many springs impregnated with salt and formerly the rendezvous for buffalo, bear, elk, deer, and other wild game, became known as "licks." Oil also issues from the base of cliffs as springs; gas in some localities, escaping through rock fissures, when ignited blazes high in the air, causing "burning springs."

Preservation of Importance to Streams in Central Kentucky.

as important to the entire State for another reason; the effect of the forest as a regulating and conserving factor of stream flow in five extensive drainage basins where three of the main rivers in Central Kentucky take their rise, and where, moreover, there is the heaviest rainfall in the State.

Climate

Rainfall.

The rainfall is derived in part from the Pacific Ocean, but chiefly from the Gulf of Mexico, drawn inland by southerly and southwesterly winds, and diminishing to the northward.[30] The average annual precipitation is greatest (50–60 inches) throughout the Cumberland basin and at the head of the other main streams. It decreases northwardly and westwardly to 40–45 inches in the basins of the Kentucky and the Licking, and to 35–40 inches in the basins of the Big and Little Sandy. A little more than half of this precipitation (from fifty to sixty per cent) is received during the six months from April to September.

Storage Capacity Slight.

Where the forest cover exists, a portion of the downpour is absorbed by a hardwood humus. The water, sinking into the pores and cracks of the rocks, saturates the underlying strata and at certain levels again reaches the surface as springs, which are feeders to the streams. However, the storage capacity of the region is slight, and the greater part of the rainfall runs off immediately. This is due chiefly to the steep slopes, especially when, having become

denuded of soil, they expose such rocks as are impervious to water. There are, moreover, no glacial lakes, such as are found in the Northern States, to act as reservoirs.

Water Supply Irregular.

Since the water supply throughout the region is dependent for the most part upon surface drainage, it is of course irregular and uncertain. The situation is rendered more serious by the seasonal distribution of the rainfall, which—although more conducive to regularity than that of Central Kentucky and the more southern coal fields, where winter precipitation is the heaviest—is not sufficient during the summer to offset the great loss by evaporation. In winter the streams are swollen to torrents and the springs are abundant, while in summer the main streams become insignificant, the tributaries for long distances are dry, and many springs disappear.

Temperature.

While the range of temperature on the Cumberland Plateau is considerable during the year,[a] it is less than in the coal fields farther north. The thermometer rarely falls below zero, and never remains below for twenty-four

[a] Observations made by the U. S. Weather Bureau at Cumberland Gap and vicinity show, between February, 1891, and December, 1903—

Temperature:

Mean annual 56°.
Mean maximum 100°.
Mean minimum 44°
Absolute minimum 20°.
Average number of days with maximum above 90°, twenty-eight.
Average with minimum below 32°, ninety-five.

Frost:

Average date of first killing frost in autumn, October 13th.
Average date of last killing frost in spring, April 19th.

Precipitation:

Mean annual precipitation 50.3 inches; spring 14.8, summer 13, fall 8.4, winter 14.1. Total for dryest year 46.2 inches. Total for wettest year 55.2 inches.

hours except at long intervals. The summers are warm, with short periods of intense heat, when the temperature rises above 90°. Open-air work is possible at all seasons, and stock is often left in pasture throughout the winter.

Population

Early Settlements.

The first permanent settlements in the Cumberland Plateau were made during the decade 1790–1800. In the latter year the region is reported in the census under the counties Fleming, Floyd, Knox, and Pulaski, with a population of 9,764. The total population of the State at that time was 220,955, the mountains thus containing about four per cent of the whole. Each decade since has shown a small increase in numbers and in the proportion to the total population of the State. In 1860 the total for the State was 1,155,684 and for the mountain region 167,089, or fourteen and one-half per cent of the whole. In 1900 the State population amounted to 2,147,174 and that of the mountains to 449,014, or twenty-one and a fourth per cent of the whole. In 1910 the figures were 2,289,905 and 537,081 respectively, the mountains thus containing about twenty-three and two-fifths per cent of total State population.

Increase of Population.

Scattered Population.

The population maps of the United States census show that this mountain population has been widely diffused from the beginning. In 1800 the density was everywhere less than two inhabitants to the square mile, except in the

lower Kentucky, Cumberland, and Licking basins, where it was between two and six inhabitants. From that time there was a gradual increase from the western margin up the main river valleys. By 1850 there was a general density of six to eighteen inhabitants to the square mile, except in the Hanging Rock iron district of the lower Big and Little Sandy basins, where it reached eighteen to forty-five inhabitants to the square mile. By 1870 a concentration had begun at the headwaters of the rivers, and by 1880 an advance both up and down stream had left but a small section, at extreme headwaters, with a density of six to eighteen inhabitants, the general average being eighteen to forty-five to the square mile. By 1890 there had been an increase at headwaters, and the section here with a density of but six to eighteen was confined to the exceedingly rough country of the upper Cumberland and Kentucky basins. By 1900 the density of eighteen to forty-five inhabitants to the square mile prevailed throughout, with a concentration of forty-five to ninety in the coal-mining centers of the upper Cumberland and Big Sandy basins, and of ninety and over along the Ohio River, in the latter basin.

Population of Towns.

In the census of 1800, under "Towns and Villages," mention is made of but one settlement in the mountain region—Prestonburg, Floyd County, its population being given as six inhabitants. In 1810 Prestonburg is shown to have increased its number to thirty-two, and mention

is made of Barbourville, Knox County, with a population of fifty-five. In 1870 two towns, each with a population of more than a thousand, are given—Ashland (1,459) and Catlettsburg (1,019), both in Boyd County, but many of the county seats had less than one hundred inhabitants. In 1900 there were two towns with a population exceeding four thousand—Ashland (6,800) and Middlesboro, Bell County (4,162), and a number of towns along the railroads with a population between one thousand and three thousand. But even at that time a majority of the county seats had only from two hundred to five hundred inhabitants. The census of 1910 shows slight change except at Ashland (8,688) and Middlesboro (7,305), although there has been an increase in the population of all towns, especially of those situated along the railroads.

Ethnic Type Pure.

Immigration has been very gradual, and since the emigration amounts to little, the increase in population has been for the most part genetic. The isolation of the region, moreover, has served to keep pure the ethnic type, so that the people is one of the most homogeneous in the United States.[a]

Negroes.

A few negroes were brought in by the early settlers. In 1800 there were 594, of whom 579 were slaves. In 1860 there were 8,174, of whom 7,016 were slaves. In 1900 the largest numbers were in Bell (1,754) and Pulaski (1,336)

[a] In a number of localities there are Indians, mostly half-breeds, who settled here at an early day. In 1900, according to the U. S. census, of one hundred and two Indians in Kentucky ninety-nine were in the mountain counties, chiefly Magoffin, where there were eighty-five. The other counties enumerated were Clinton (five), Laurel (six), and Wayne (three).

County Court Day.
(See page 7.)

A County Seat.
Hindman, Knott County, a village of 370 people, at the forks of Troublesome Creek.

counties, while in Johnson there was but one, in Elliott two, and a few in the other counties, the total number being 10,804. Most of the early inhabitants did not require slave labor on their small mountain farms; moreover, few had the capital with which to purchase it. Since the Civil War the rigorous conditions of life and the lack of opportunity for domestic service have rendered the mountain region unattractive to the freedmen; yet there has been a slight increase since 1870 in the larger towns, especially in Ashland and Catlettsburg on the Ohio River and in Middlesboro, Bell County, where the density in 1900 was four to eighteen (colored) inhabitants to the square mile. A comparison of the United States census reports shows little change in the distribution of the negroes. The largest numbers have always been found in the basins of the Cumberland and Kentucky rivers.

Foreigners.

Few foreigners entered the region before the era of railroads, and even in 1900 they formed less than one per cent of the population, except in the mining section of the Cumberland basin, where the percentage was from one to five. The density was less than one inhabitant to the square mile, except in Laurel County, where it was from one to four. Practically all foreigners are confined to the mining centers. The majority, natives of England, Sweden, Germany, and Switzerland, are skilled miners who have been driven from Pennsylvania and other Northern States by unskilled labor from South-

ern Europe. The movement began in Pennsylvania about 1875, and since 1880 the Kentucky field has been receiving small relays of the displaced workmen as the various new mines have been opened. Recently some of the Southern Europeans, principally Italians and Hungarians, have begun to come in, but as yet they are in the minority.[32]

Unsuccessful Attempts to Induce Immigration.

Unsuccessful attempts have been made by the State to induce immigration. In 1880, when the State Bureau of Immigration was formed, agents were sent abroad and literature disseminated. By January, 1884, there had been several colonies established. The first colonists were from the Canton of Bern in Switzerland, who in the spring of 1881 located in the vicinity of Bernstadt, in Laurel County.

Colonies in Laurel and Rockcastle Counties.

By October, 1883, there were 440 of these settlers, who had purchased 4,146 acres of colony lands. About the same number of foreigners located in other parts of Laurel County. In the south (at Strassburg) there were wine-growers from the Upper Rhine, who planted a considerable acreage of grapes. There was also a colony (Pine Hill-Salzburg) in Rockcastle County.[33] All of these immigrants came with the hope of producing wine, garden truck, and cheese, and when their efforts in these directions failed some went into the coal mines, but many left the mountains.

Original Settlers of same stock as Population of Central Kentucky.

The early pension lists of the United States indicate that the original settlers, like those of Kentucky as a whole, came from all the eastern seaboard States, but chiefly from Virginia. For example, the list of pensioners enrolled

in accordance with the act of 1818,[34] for Floyd County, shows one from South Carolina, one from Maryland, one from New York, two from North Carolina, two from Pennsylvania, and ten from Virginia. Later enrollments[35] likewise suggest a preponderance of Virginia stock, but also show a large element of the population to have come from North Carolina.[a]

Nationality.

Genealogical records of this people are utterly lacking. Their names and certain survivals in language and customs point to English and Scotch-Irish ancestry for the great mass, although a few German and Huguenot names are found.

Survivals of Old English Speech.

There have been collected from the daily speech in this and the immediately adjoining region three hundred words, obsolete since the sixteenth century, or surviving only in the dialects of England.[36] "The English they speak is that of the Elizabethan age. They say 'bus' for kiss, 'gorm' for muss, 'pack' for carry, and 'poke' for a small bag. Strong past tenses and perfect participles, like 'holp' and 'holpen,' and the syllabic plural of words ending in *st*, like 'beasties,' are constantly heard. The Saxon pronoun 'hit' survives. . . . The ballad of

[a] See Appendix, also Note a, pp. 89, 90.

According to Shaler (History of Kentucky, p. 221), between 1774 and 1860 "the original settlement and the subsequent increase of the Kentucky population were almost entirely drawn from the Virginia, North Carolina, and Maryland colonies; at least ninety-five per cent of the population was from these districts. Probably more than half of this blood was of Scotch and North English extraction; practically the whole of it was of British stock. The larger part of it was from the frontier region of Virginia."

'Barbara Allen,' popular in Great Britain three hundred years ago, and known now in America only to the musical antiquarian, is a standby in several of the mountain counties. The tragic ballad of 'Little Sir Hugh,' or 'The Jewish Lady,' as it is variously called, traces back to the 'Prior's Tale' of Chaucer. The lengthy ballad of 'Lord Bateman,' or 'The Turkish Lady,' shows unmistakable identity with the poem of the same name in Kurlock's 'Ancient Scottish Ballads,' though the Scotch version is longer."[37]

Survivals of Old English Customs.

The survivals of customs are no less significant. In some places the sheriff, standing on the steps of the court house, still chants the old cry: "Oyez! Oyez! Oyez! The United States Court of America is now in session. All you having complaints draw nigh, and you shall be heard. God save the United States and this Honorable Court!"

Here and there a community or a family connection observes as Christmas the old Twelfth Day of the Gregorian calendar, that is, January 6th,[a] which is celebrated as the Feast of the Epiphany in the English Church and

[a] The following extract is from a report (January, 1910) of the W. C. T. U. Settlement School, at Hindman:

"On Christmas Day . . . a man less than forty years old, living nine miles from the school, dined with us. Afterward, sitting before the library fire, he sang 'Loving Nancy' and other old ballads for us, and then told . . . about the Christmas customs he had been used to. He said, 'The old folks always claim that the sixth day of January is real Christmas—Old Christmas, they call it; but the young folks has a notion, like you have, that it comes to-day—New Christmas. I don't rightly know which it is, but I always feel more like Old Christmas is Christmas than New Christmas, and I wouldn't do any work on Old Christmas. On New Christmas they don't give presents like you women do, but the young men do a sight of drinking, and the girls visit around and frolic. The old folks let them have their way then (they say New Christmas

in the Protestant Episcopal Church of the United States. The "rule of the road" here, as in England, is to turn to the left when vehicles or horsemen meet.

In the Big Sandy basin and the contiguous region an old English method of measuring timber is found, the "Big Sandy Cube Rule," used, so far as known, nowhere else in the United States.[38] In 1878 Shaler, of the Kentucky Geological Survey, saw in the upper Cumberland basin men hunting squirrels and rabbits with old English "short-bows." "These were not the contrivances of boys or of to-day, but were made and strung, and the arrows hefted, in the ancient manner. The men, some of them old, were admirably skilled in their use; they assured me that, like their fathers before them, they had ever used the bow and arrow for small game, reserving the costly ammunition of the rifle for deer and bear."

The counterpanes, upon the making of which the women spend much of their time, would be an interesting object of investigation, since they are identical in design with those of New England a century ago, and were evidently brought to this country from different sections of the

is for young folks). But when Old Christmas comes, they won't stand any antic ways. They cook beforehand so's they won't have any work to do. Then Old Christmas Eve at midnight the cattle kneel down and pray and the elders blossom. Anybody that will get up and listen and watch can hear the cows lowing and mowing then, and see them on their knees and see the elder stalks put out a head of blossoms. Next morning when the old folks get up they just set around and hold their hands and mourn all day, and don't eat; and the young folks have to eat cold victuals; and if any of them get noisy or foisty, they are liable to a scolding, for it's a solemn season'."

British Isles. The handmade baskets, the hand-mills, and other articles in daily use, are of classic English design. An investigation of them would probably lead to important information concerning the origin of the people.[a]

The Mountaineer: His Economic Problems.

Until the era of railroads, the people, ensconced in deep valleys, accessible only through gaps where lateral streams head in the ridges, were as isolated as if inhabitants of the loftiest mountain range. During that early period, with the exception of iron manufacture, which reached considerable proportions in the Hanging Rock and Red River districts, there was but insignificant commercial utilization of the resources. The mountaineer, left to himself, derived his chief income from the soil, though he added to it by small shipments of coal, forest products, iron, salt, and other commodities. In this way he was able to make a bare "living," and, ignorantly satisfied with his lot, he brought up families of patriarchal size.[b]

Local Exploitation of Resources.

[a] The homogeneity of this population renders it of special interest to the ethnologist and sociologist. A study of the cephalic index, nigrescence, stature, and other physical characteristics would be of great assistance in determining the origin of the people. Three physical types are quite common: hazel eyes and dark hair, combined with a comparatively broad and short head suggesting the Highland Scotch; dark blue eyes, black hair, and fair skin, suggesting the Irish; fair complexion, light or red hair, and blue eyes, suggesting the Anglo-Saxon. The stature is both tall and stocky, but the tall seems to predominate; measurements would probably show a large number of men over six feet. For the significance of such data see William Z. Ripley, The Races of Europe, pp. 300–334. Also Franklin H. Giddings, Inductive Sociology, pp. 51–54, and The Principles of Sociology, Book 3, Chapter 2.

[b] According to the census report for 1900 the average size of the family in Kentucky was four and nine-tenths, but in all mountain counties the average was over five; in Clay five and nine-tenths, and in Knott six. Of the native white population over forty-one per cent was between the ages of five and twenty years. Males were in excess of females in all counties.

Transportation and Commerce

Isolation cause of Economic and Sociological Poverty.

The life of the people was primitive in the extreme. In the log cabin was reproduced the independence of the pioneer home. The man was cobbler, blacksmith, and miller as well as farmer, while the woman, adept at spinning and weaving, supplied the household with raiment and furnishings.[a] Remote from the seat of government the small groups of families, scattered up and down the creek valleys, were a law unto themselves. The blood feud became the effective means of social control.[39] The great poverty, due for the most part to isolation, was not only economic but, partially as a result of this, sociological as well. Such communities can still be found in the more sequestered coves and valleys.

Conditions disappearing which made "The Mountaineer" possible.

Since the advent of railroads, the conditions which have made possible "the mountaineer," portrayed in magazine and novel, and far-famed for his feuds and "moonshine" whisky, have been gradually passing away. The outside capitalist has come in, and to him the people are selling their mineral and timber rights. In many cases even the surface rights are not reserved, and the tenantry system is increasing. To a few of the more enterprising inhabitants this has meant comparative wealth, but the great majority, formerly independent landowning farmers, are now of necessity seeking employment in mill and mine.

[a] Manufacture in general is still very primitive and is carried on by men. The number of women and children who are wage-earners, except in Boyd County, is inconsiderable. (See note, page 184; also Appendix, Table 3.)

People unfit for Modern Industrial Life.

In general the population is unfitted for such work under modern industrial conditions. Endurance and muscular strength are common, but a strong constitution is exceptional.[a] Bad housing and sanitation, ill-cooked and insufficient food, exposure to weather, and other evils incidental to poverty, have had their detrimental effects, which have been augmented by a close intermarriage of families and by an inordinate use of liquor. Moreover, since the mountain laborer still relies upon his farm as his main support, his services can not be depended upon. To work when the larder is empty and to rest when it is full has always been his economic ideal. Accustomed to do

[a] A physician from Lexington, during the past year (1911), in the interest of the Society for the Study of the Prevention of Blindness, and to ascertain if possible how much trachoma and ophthalmia existed in this region, visited the Settlement School at Hindman. The school children and a number of patients from the immediate neighborhood were examined. The physician's report reads: "We could scarcely believe there would be so many (patients). But . . . the school children were given preference, and we began examining them. While we were there chiefly for eye work, we found at least three-quarters of the children with large adenoids and diseased tonsils, many cases of sore eyes being aggravated by the nose and throat conditions; in addition to this the mental and physical condition of the child was handicapped by their presence. The pitiable eye conditions of many living in the valley beggars description. The effects of trachoma are seen everywhere, some in the active stages, others showing recurrent attacks, each attack leaving its traces. Every patient with sore eyes was asked how many more in the family were suffering from the same disease. Not in a single instance was it said he or she was the only one. The picture of women with sunbonnets on, often with a black veil over the bonnet, sitting with bowed heads, men with hankerchiefs over their eyes and hats pulled down, babies with their little heads buried in the mother's shoulders, all trying to exclude the light from their eyes, almost out from the disease, are never to be forgotten."

The records of two hundred patients examined show: 96 with adenoids and diseased tonsils; 38 with refractive error; 48 with trachoma; 16 with other eye troubles, making over one-half eye diseases; 18 with diseased turbinates; 5 with diseased ears; 8 lithemic. (Annual Report, June, 1911, W. C. T. U. Settlement School.)

his work in his own way, he is quick to resent dictation or interference, and with little sense of the value of time or the moral obligations of a contract, will forsake his task because of a fancied slight,[40] regardless of consequences to employer and industry. Without disposition to co-operate, he is at once the menace and despair of the labor union, although temporarily influenced by each walking delegate. Many of the people would prefer to enter politics or take up a profession, since they regard industrial life as degrading; but illiteracy shuts out strong and acute intellects from opportunity and from advancement to important positions, although recently the educational facilities have been greatly improved.[a]

Illiteracy Obstacle to Advancement.

[a] The percentage of illiterates is abnormally high even for a Southern community. In 1900, although in the State as a whole the percentage of white males twenty-one years of age and over who could not read or write was 13.9, in the mountain counties it was, with a few exceptions, between 25 and 30, and in eight counties it was between 30.5 (Harlan) and 35.8 (Knott). Formerly the school term lasted but three months in the year and the teaching staff consisted of residents of the region, who themselves possessed but little education. The local conditions were so unbearable and the school fund so small that teachers from the outside could not be induced to stay. Now, however, the school term has been lengthened to six months, and many of the school-houses have been greatly improved. Mission schools have come with the railroads; Berea College, the school at Hindman, and other institutions are of inestimable value to the people. Some of the more progressive mine operators have opened schools for their employes and the children. Newspapers are an incentive to learning. In 1900 there were more than twenty contiguous counties without a local publication, while at present there are few counties without a press, and in several more than one paper is published.

The following extract is from a report, January, 1811, of the Settlement School at Hindman in Knott County, forty-five miles from a railway:

"In going about among the mountain people, hearing their good English names, and inquiring as to family history, one invariably finds that the great-great-grandfather came out of Old Virginia, just as ours did, after emigrating from Great Britain there. And often when the present generation is unable to read or write (having been 'raised fifty mile from a school-house or church-

Foreign Labor substituted in Mines.

The coal operators are substituting immigrant labor in the mines, leaving the mountaineer to the farm and forest for support, of which the forest has furnished at least one-half. The community unaided can not reëstablish the forest nor provide efficient highways for the transportation of its products; both are prime requisites if the people are to advance in prosperity.

Social and Economic Problems.

With the development of the region as a coal field there are thus arising numerous economic and social problems concerning conservation of natural resources and improved transportation facilities, of significance not only to an increasing local population but to the State and nation, a proper solution of which demands a knowledge of past economic conditions.

Region Isolated by Natural Barriers.

Here rocky ridge and unnavigable stream not only render internal communication difficult, but cut off this section of the State from Central Kentucky. A study in the history of transportation shows that numerous schemes have been projected by the Federal and State governments, as well as by individuals, which if completely carried out

Projects abortive that would have opened up Channels of Communication.

house, maybe') they will tell how their 'grandpaw' or 'great-grandpaw' had learning, and possibly will hunt up an ancient, crumbling Bible, or some other book once owned by the dead-and-gone 'scholar.' . . . One old man of about ninety . . . informed me that he had at his house 'all the British poets.' As it was probably his father or grandfather who had gathered them, that would mean all the British poets up to a hundred years ago. With good blood in them, and good traditions behind them, . . . the children who are brought to us by their eager parents usually show great ability and ambition, are able to accomplish more in their studies than ordinary children, along with the four-and-a-half hours of manual labor each must do daily, and when they go out from us to college, out-distance the other students." (See Table I, Appendix.)

would long ago have overcome this isolation. But all have been abortive. Internal improvements, whether of river or road, have stopped along the margin, or where they have penetrated have been of such insignificant proportions as to have afforded but little relief to the land-locked district. Railroad building began in 1856, but made no headway until between 1870 and 1890. Since then progress has been slow, and confined until recently to marginal counties. The explanation is found in the fact that none of the natural resources have been of sufficient commercial value in the past to warrant the large expenditures of labor and capital required by such schemes. At an early period, iron and salt came within the margin of demand and were the source of a considerable traffic, but for many years now, the region from the standpoint of these commodities has been in the category of "no rent" land. It has indeed been unable to compete within its own borders with the output of other fields brought in by river and rail.

Railroads confined to Marginal Counties until recently.

Resources not of sufficient Commercial Value to justify Large Expenditures necessary.

The soil has afforded some surplus, but the land, because of its topography an easy prey to the erosive action of rain and stream, has been cultivated so long and continuously, and by such antiquated methods, that its potential fertility has gradually decreased. Oil, gas, and clays, although in progress of exploitation for the last two decades, have not as yet been of much importance, and but little is expected of them in the future.

Since an early day, lumber has been shipped to outside markets, and the forest area with its valuable timber has been reduced, until now, while still the chief source of wealth, its end is almost in sight.

Coal has been exported since 1827, probably even earlier, but up to the period of railroad expansion the output was insignificant. It is comparatively small at the present time, and is limited to a few mines scattered along the railroads. Nevertheless, it is upon the development of the region as a coal field that the systems of transportation, not only by rail but by river, will depend in the future.

Development as a Coal Field is stimulating the Building of Railroads by outside capital.

As a matter of fact the region is at the present time about to become an important coal center, for the more available mines in other parts of the Appalachian field, fully adequate in the past to supply the demand for coal and coke, have begun to show exhaustion. Slowly, as new sources of supply become necessary, private capital is extending the railroad system through the narrow valleys of the Cumberland Plateau to the gaps in the mountain barriers, through which must enter and exit all lines of transportation.

Federal Slackwater Improvements.

Slackwater improvements undertaken by the Federal government for the purpose of facilitating the export of coal have been extended for some distance up the Big Sandy River, and are now approaching the coal field on the Cumberland and Kentucky rivers. Future extension is uncertain, because coal is shipped exclusively by rail. The

field is so extensive, however, that its development on a large scale will probably mean improvement of the waterways[a] for long distances, as well as an increase in railroad mileage.

There will always be parts of the region which can be connected only by highways. At present the construction and maintenance of roads is dependent on local capital and skill, which are by no means able to cope with the difficult natural conditions. Recent legislation renders State aid possible, and as public sentiment in favor of good roads is being awakened wherever railroads have penetrated, this may do much to promote internal intercourse. Great benefit will thereby accrue to a population which, because of various and changing economic controls for which it has not been responsible, has been tardy in its social progress, and under a system of *laissez faire* has developed a mountain economy inimical alike to itself and to the State and nation.

Roads Dependent upon Local Capital.

Improved Roads would promote Social Progress.

[a] During high water (see page 23) the streams up to headwaters are utilized for "floating" logs, and for some distance within the field a descending navigation is possible by means of lumber rafts, coal boats, and other small craft. Steamboats can ascend for four to six months annually as far as Pikeville on the Big Sandy, West Liberty on the Licking, Beattyville on the Kentucky, and Point Burnside on the Cumberland.

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THE KENTUCKY MOUNTAINS

TRANSPORTATION AND COMMERCE

CHAPTER I

Highways—Construction and Maintenance

THE construction and maintenance of highways in the mountain region have been accomplished in accordance with a general State law, first of Virginia and later of Kentucky, relegating jurisdiction over public roads to the courts of the various counties through which they pass.

Original Virginia Road Law: survival of feudal regime.

The original Virginia road law,[1] adopted in 1632, left the regulation of highways to the governor and council, to the commissioners of courts, or to the parishioners of each parish.[2] In 1657-1658 the law was supplemented by an act giving jurisdiction to county courts, which were directed to appoint surveyors annually, and in general to follow the "course used in England."[3] At that time English road law was emerging from the customs of feudal days, when the care of highways had been included in the tenant's "trinoda necessitas" (threefold service). Custom had gradually referred this care to the respective parishes, and

the repair of bridges to the county at large. At first it was the duty of no particular officer to call the parishioners together and set them upon this work. Later, however, surveyors of highways for each parish were directed to be chosen by the constable and church wardens of that parish, and still later were appointed by two neighboring justices and could have salaries allotted to them for their trouble.[4] The law, with slight changes, was readopted by Virginia in 1785, and was in force in Kentucky as a part of Virginia until 1792; it was there reënacted,[5] practically unaltered, February 25, 1797. Since then, with minor modifications, it has remained a general road law in Kentucky.

Adopted by Kentucky February 25, 1797.

This system, known locally as the "militia" or "warning of hands," is thus a survival of the European feudal regime, and one of the most archaic now used in the United States.[6] It is essentially a "statute labor tax."[a] For their general supervision and care, the roads are divided by the county

"Statute Labor Tax."

[a] The old English law required inhabitants between the ages of eighteen and sixty-five to work or furnish substitutes, for six days in each year. When personal labor was not sufficient, the surveyors, with the consent of the quarter sessions, could levy a rate on the parish. (Blackstone, Vol. I, p. 358.) The Kentucky law of 1797, Section 4, reads: "All male labouring persons of the age of sixteen years or more, except such as are masters of two or more labouring slaves, of the age of sixteen years or more, shall be appointed by the court to work on some public road; for every person so appointed who when required by the surveyor placed over him, shall, without legal cause or disability, fail to attend with proper tools for clearing the road, or shall refuse to work when there, or to find some other person equally able to work in his room, the sum of seven shillings and sixpence for every day's offence shall be paid by himself if a free man of full age, if an infant then by his parent, guardian or master, or if a slave or servant then by his overseer, if he be under one, or otherwise by his master, to be recovered by the overseer of the road, before any justice of the peace within his county, one half to the use of such overseer, and the other to be applied to the further improvement of the road." (Littell's Laws of Kentucky, Vol. I, pp. 634, 635.)

into precincts, each consisting of a number of miles, over which is appointed an "overseer" or "surveyor," whose duty it is to look after the repairs. Commissioners are appointed by the courts to decide upon the advisability of opening new roads and to condemn the necessary land. The manual labor is performed by the able-bodied male population, or their substitutes, living within the road precincts.

System of Taxation permitted, March 10, 1894.

March 10, 1894, there came into effect a new statute,[7] which permits the old "militia" system with unimportant changes, but which also provides for a fund (the Road and Bridge Fund) by county taxation. This is optional with the fiscal court of each county, which may levy a tax for roads and bridges not to exceed twenty-five cents on each one hundred dollars' worth of property, and also a poll tax on male citizens between eighteen and fifty years of age, not to exceed one dollar. Labor may be substituted for the tax. The work of improvement is placed by the court in the hands of a supervisor, who uses either hired or delinquent labor, or else lets out the road to a contractor. A county judge or a magistrate may be intrusted with the authority of a supervisor.

Old System retained in the Mountains.

A number of mountain counties[8] have imposed the tax, but in all cases taxation has been but supplementary to

[8] In 1904 a tax varying from eight to twenty-five cents was levied in nineteen counties. (U. S. Department of Agriculture, Office of Public Roads, Circular No. 58.)

In 1907, improvements under supervisors were made in three counties (Boyd, Pulaski, Lawrence); under magistrates in two (Elliott, Morgan), and under a county judge in three (Powell, Clinton, Whitley). Everywhere else the old system of overseers prevailed. (Kentucky Bureau of Agriculture, 17th Annual Report, Table of Roads in Kentucky, opp. p. 185.)

the older method, the road levy often being omitted by the courts. The fact, moreover, that the tax may be paid in labor, serves to perpetuate the old system. The counties show considerable variation in the details of the general law, due to modifications allowed them by the Legislature at different times.[8]

Internal Improvement.

From the beginning, this antiquated system was found inadequate to provide satisfactory highways, even in sections of the State more favorably situated for its successful operation than the mountain region. It was therefore supplemented at an early date by State and county aid.

Virginia System: State aid by Special Acts.

Soon after the first permanent settlement was made in Central Kentucky a series of acts were passed by the Virginia General Assembly with a view of improving the mountain roads. The acts provided for a number of commissioners to supervise the improvements, collect subscriptions, and to let the roads to "proper persons" or "undertakers." In a few instances a guard was afforded, to protect the traveler or laborer from the Indians. The work was accomplished by such inhabitants as were subject to road duty in accordance with the general law. The funds were, for the most part, obtained by subscriptions taken in payment of delinquent taxes, from those to be benefited, but in some instances appropriations were made from the State treasury, or in grants of land.

Method continued by Kentucky.

This method was continued by Kentucky after the separation from Virginia. Special enactments of the

Legislature concerning roads, together with amendments and repeals, followed one another so rapidly that it is difficult to discover the road law in force for a particular highway at any given time.

Commissioners.

At first the State acted through commissioners, appointed by the various acts in Virginia fashion, who received stipulated sums for the time of actual service, and who were required to furnish "penal bond" for the execution of duty. The services required differed under each act, but for the most part they consisted of the supervision of improvements, the collection and disbursements of funds in a manner specified by the act, and the appointment of "undertakers" to "view and mark" the road. The undertakers, who also furnished "penal bond," then called upon such of the inhabitants as were liable to road duty, living within a specified distance from the road, to work thereon for a time usually stipulated in the act. Innumerable amendments were passed providing for exemptions from road duty and changing the length of time of service. Tools were usually supplied by the State, but in some cases the undertakers were required to furnish not only these, but food and shelter for the workmen as well.

Undertakers.

Creation of Board of Internal Improvement, February, 1835.

February 28, 1835, a State "Board of Internal Improvement"[a] was created[9] to succeed a temporary board authorized

[a] The law in regard to members of this board was changed at various times. In 1835 it designated the governor as ex-officio member and president, and three citizens of the State, mentioned by the governor and approved by the

by the Legislature in 1828. Thereafter all important works and the disbursement of public money upon them were made under the direction of the board, which paid to the skilled engineers in its employ salaries considered at that time to be fairly high.[a]

"State Roads" Improvement Funds.

Highways improved by the State became known as "State roads." The expenditures upon these were provided for by the State in a number of ways, specified in the various acts—county levy; lottery; tollgates or "turnpikes"; private subscriptions in "money, labor, or property"; appropriations from the State treasury, made directly or through taking over a large share of the stock in joint stock companies,[b] which were private toll-road organizations. The first two methods, dependent upon local prosperity for success, were not found practicable in the mountain region, with its sparse population and lack of

Joint Stock Companies.

Senate. By the act of February 9, 1836, the governor was no longer on the board, but he annually appointed, with the consent of the Senate, three members, one for "each of the three sections of the State."

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[a] Between 1836 and 1843 inclusive, the salary of the chief engineer aggregated $20,383.59 and that of the resident engineer $15,796.38. Ten other engineers and a secretary were also regularly employed during that period, the total expenditures for engineering services, including the secretary's salary, amounting to $86,215.16. For details see Kentucky Legislative Documents, 1847-1848, pp. 736-741.

[b] The amount which the State could invest in these organizations was limited at different times. According to the act of February 28, 1835, if in consequence of the sparsity of population and the pecuniary condition of the country through which it passed a road could not be constructed without the State subscribing more than one-half the stock, the board could take stock not exceeding two dollars for every one dollar subscribed by individuals.

wealth. Tollgates[a] likewise could be used but little. They were established, however, upon a number of roads which were then kept in repair by the toll collected from travelers, under the theory that those who used the highways should be charged with their maintenance. In such cases either the gate was leased to a keeper who, guaranteeing to keep the roads in repair, retained the surplus funds for his own use; or such an incumbent was appointed by the State at a definite salary, the improvements on the road being paid from the tolls and the profits accruing to the State, to be used, as a rule, for further improvements.

Turnpikes or Tollgates.

[a] "Turnpike" is an old English word for tollgate. By the close of the eighteenth century turnpikes had been quite generally established on English highways, in aid of "rates." The law relating to them depended on particular powers granted in the several road acts, besides some general provisions. (Blackstone, Vol. I, p. 359.) The term was so used in Kentucky for many years, but later was applied to the road upon which the gate was erected. The first turnpike in Kentucky was established in the mountains, on the Wilderness Road, by an act of 1797, and was for several years the only one in the State. Later, many were maintained in Central Kentucky by the turnpike companies, and afforded the chief source of revenue for road purposes, until the increase in numbers rendered the fees so burdensome, especially to laboring men, small landowners, and tenants, that they formed a serious obstacle to travel. The act of March 17, 1896, granted to the counties the right to acquire all tollgate roads within their boundaries if it should be so decided by a popular vote, and the power of levying a limited tax for maintaining them as free roads. The act had been preceded by occasional outbreaks of mob violence, and in the winter and spring of 1897, in all those counties which had not yet taken advantage of the law, there was a widespread destruction of gates by lawless bands of "tollgate raiders." The depreciation in the value of stock in the turnpike companies soon led to the adoption of free roads throughout the State. There are, however, a small number of tollgates still in existence. (Kentucky Statutes; History of Kentucky, by Z. F. Smith, pp. 846-847.)

From the beginning of the "turnpike" system the State found great difficulty in fixing satisfactory toll rates. Dissatisfied citizens sought other routes, and the county courts, sympathizing with applicants, granted new roads, familiarly known as "shunpikes." Empty and light vehicles passed on these, and the turnpike roads came to be used chiefly for heavily laden wagons. (Legislative Documents, 1841-1842, p. 237.)

The rates were fixed, and there were stipulations in the various acts concerning the disbursements, travelers liable to toll, exemptions, etc. Subscriptions in labor—the chief asset of the mountain population—and appropriations from the treasury, were the main sources of revenue. The appropriations were generally direct, as the joint stock companies, markedly successful in Central Kentucky, did not prosper here, where the inhabitants had scant means of investment in them.

Special Funds for Internal Improvement, February 22, 1834.

By the act of February 22, 1834, funds for the first time were set aside expressly for the purposes of internal improvement. Formerly, all appropriations had been made from the "ordinary sources" of State revenue. Thereafter subscriptions to stock, or direct appropriations made, had no claim upon the general exchequer "except in the event of the partial or entire failure of the designated sum" to meet the demands which the Legislature made upon it. The act provided that the proceeds of stock owned by the Commonwealth in the Bank of Kentucky, and the Bank of the Commonwealth of Kentucky, and the proceeds of public lands in the district west of the Tennessee River, be appropriated, for paying subscriptions that had been or might be authorized on behalf of the Commonwealth in joint stock, turnpike road, and bridge companies and for payments out of the public treasury for roads, navigation of rivers, and the construction of bridges.[10] From

this time, appropriations were usually made in the form of "Internal Improvement Scrip," or land warrants issued by the State.[a]

It was soon found that in order to meet the "requirements" of the projects already undertaken the State must either increase its revenues or else "resort to the credit of the Commonwealth." The latter plan was adopted, and in February, 1836, a "sinking fund"[b] was formed for the purpose of carrying on the public works, the payment of interest on money borrowed for that object, and the final redemption of loans.[11]

"Sinking Fund," 1836.

[a] By act of February 28, 1835, the governor was required from time to time to issue bonds or scrip of the Commonwealth for such sums as were required to pay for subscriptions to the turnpike companies, or for improvement of rivers, and to sell the same. The interest on the bonds was not to exceed five per cent. They were redeemable after twenty years, and within thirty years, from date of issue. (Acts.)

[b] The fund was originally made up of (1) the tax on the capital stock of the Bank of Kentucky, the Northern Bank of Kentucky, and the Kentucky Bank of Louisville; (2) the excessive dividend of the State on her stock in these banks, after paying interest on State bonds sold to pay for said stock; (3) premiums on the sale of State bonds; (4) dividends on stock in bridge and turnpike road companies; (5) profits on works of improvement made by the State, or in which the State was interested; (6) the excess over $10,000 in the treasury after payment of annual expenditures and appropriations. In 1837 moneys from State stock in the Commonwealth Bank and "old Bank of Kentucky" were assigned to the fund, and also the surplus revenue of the United States invested in stocks and not "dedicated" to the "general system of public instruction." (Kentucky House Journal, 1837–1838, p. 23.)

The latter surplus, amounting to $1,433,757, of which the sum ($1,000,000) set apart by the Legislature for public schools in 1837 (February 23d) was reduced to $850,000 in 1868 (February 16th), was Kentucky's share of the unrecalled Federal deposit (1837) in the various States from the revenue derived from the sales of public lands. At various times other appropriations were made to the fund for payment of the State's debt for internal improvement; in fact, all available resources were used for this purpose. (Collins, Vol. I, pp. 503, 325.)

1834-5—Projects beyond Resources of State.

In 1834–5, under its special board and with special funds thus arranged for, the State embarked upon a vast scheme of "internal improvements," concerned not only with the construction of highways, but also with improvement of rivers and the building of railroads. If the design had been carried out, the mountain region would have been brought into close touch with the outside world. By 1837, over a million dollars was being annually expended. Many of the improvements planned, however, were not only far beyond the finances of the State in their cost, but also were in advance of the limited commerce then existing, and could not be self-sustaining for years to come. The panic of 1837 caused a halt, and in 1842 many of the more important works throughout the State were suspended.[12] Especially was this the case in the mountains, where economic conditions were least favorable to early returns. The vast expenditures had imposed such a burden upon the State[a] that the Constitution of 1850 curtailed the power of the Legislature to raise money on the credit of the Commonwealth. It could no longer do so for purposes of internal improvement without provision for an annual tax, sufficient to pay the stipulated interest and to discharge the debt within thirty years; nor without a majority of votes cast for this policy at a general election.[13]

Panic of 1837.

State Aid withdrawn from Mountains.

Constitution of 1850 restricts State Aid.

[a] In 1849 there was a funded debt of four and a half millons, incurred chiefly for public works. (Shaler, History of Kentucky, p. 215.)

After that date numerous bills were introduced in the Legislature calling for improvements to be founded on public debt, but they were for the most part defeated before coming to popular vote, and were steadfastly opposed by public opinion.[14] Thus restricted, State aid was gradually withdrawn from the various undertakings. In November, 1909, a constitutional amendment was added by vote of the people, permitting aid to counties on behalf of roads. This marks the beginning of a new era in the highway legislation of Kentucky.

November, 1909, Restriction Removed in behalf of Roads.

Under the Board of Internal Improvement, counties and minor civil divisions had contributed somewhat to the public works. In some counties of Central Kentucky local boards had been created. By act of February 21, 1837, the vacant lands east of the Tennessee River were given over by the State to the counties in which they were located, to furnish them funds for internal improvement. In some cases appropriations by the counties were supplemented by the State. But little of importance was accomplished, however, until after 1850, when many of the counties undertook, by means of bond issues, to carry on the work abandoned by the State. These projects, like those of the State, ended in financial disaster, and were practically prohibited, for the mountain region at least, by the act of March 4, 1870, which rendered unlawful the issue of bonds or the imposition of a tax by a county "in aid of public works" without the vote of the people. The Con-

County Aid unimportant until 1850.

Restricted by Constitution of 1891.

stitution of 1891 imposed further restrictions, providing that with the consent of two-thirds of the voters, any county might issue bonds for road purposes not to exceed two per cent of the value of its taxable property. Counties issuing such bonds were required to provide for the collection of an annual tax sufficient to pay the interest and to create a sinking fund for the payment of the principal forty years from the date of issue. In the mountain counties the creation of this sinking fund was made impossible, by a limitation of the total county levy to a maximum of fifty cents on each one hundred dollars of taxable property.[15]

Restrictions Removed, 1909.

These restrictions are removed in the interests of good roads by the constitutional amendment of November, 1909 (Bosworth-Hyatt), referred to above, which permits the issue of county bonds guaranteed by the State. The amendment reads:

Amendment of 1909.

"The credit of the Commonwealth may be given, pledged, or loaned to any county of the Commonwealth for public road purposes, and any county may be permitted to incur an indebtedness in any amount fixed by the county, not in excess of five per centum of the value of the taxable property therein, for public road purposes in said county, provided said additional indebtedness is submitted to the voters of the county for their ratification or rejection at a special election held for said purpose, in such manner as may be provided by law, and when any such indebtedness is incurred by any county, said county may levy, in addition to the tax rate allowed under Section 157 of the Constitution of Kentucky, an amount not exceeding twenty cents on the one hundred dollars of the assessed valuation of said county for the purpose of paying the interest on said indebtedness and providing a sinking fund for the payment of said indebtedness."[a]

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[a] No plan of action under the amendment has as yet been adopted. The bill proposed in 1910 calls for a county engineer, to take the place of all super-

visors and surveyors, appointed by the fiscal court of each county, with a salary of from $500 to $1,800 per year; the creation of a State Roads Department, to be controlled by the Commissioner of Agriculture, with a salary of $2,400; the creation of a State Road Fund by a tax levy of five cents on one hundred dollars' worth of property, the fund to be collected in the same manner as other taxes. The weak point in the system is that the doors of the State treasury are opened, without protection against raids by contractors. A general statute could furnish this protection. The conditions under which the credit might be pledged should be specified. Moreover, there should be a general road law, with which counties accepting aid from the State should be required to comply.

There is at present a scheme for Federal aid to roads in Kentucky. Such aid has been sought at various times, but as yet without success. The most important project was for a national turnpike between Zanesville, O., and New Orleans, extending through Central Kentucky. The bill passed Congress in 1830, but was vetoed by President Jackson.

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15. Kentucky Constitution, 1891, Sections 157–159.

CHAPTER II

1750–1775—Early Trails

Main Lines, Northwest-Southeast, Determined by Topography.

The main transportation lines through the mountains lead in a general east-to-west direction. From both sides it is difficult to build a road through, on account of the topographical obstructions. Along the western margin, the highly dissected Conglomerate ridges of the escarpment, which have been compared to a Chinese wall, covered with dense thickets of laurel and rhododendron, are, except at a few points, most formidable barriers.[a] Here the only feasible approach is by way of the valleys of the Kentucky, Licking, and Cumberland rivers, which, cutting across the barriers at right angles, offer open passage into the interior as far as headwaters, or through certain lateral valleys, which meet at particularly low gaps on the crests of the ridges.

Conglomerate Ridges the Barriers on the West.

Western Passes.

[a] This is well illustrated by the following description of the difficulties encountered by State surveyors in 1858–1859, when running a cross-line in Wolfe and Menefee counties: "All the streams on the line have a precipitous bank on either one or both sides. . . . The valleys, from the summit of one ridge to that of another, vary from 1,400 feet to 3,500 feet. Of these drains, no less than forty were crossed in seventeen miles. . . . Our work in crossing these . . . valleys was very laborious. Owing to the precipitous . . . walls . . . it was necessary in crossing them either to head the valley or to find a break in the wall on one side by which to descend, making egress from the valley by some similar drain on the other side; but since these drains were neither on the line or opposite to each other, it was frequently necessary to walk from one to three miles to cross ravines only 2,000 feet wide. In addition to these difficulties, the sides of the drains were frequently grown over with underbrush matted into a dense mass of vines growing amongst it." (Kentucky Geological Survey, Robert Dale Owen, Director, Vol. IV, p. 529. 1861.)

Rhododendron (*Rhododendron Maximum*) and laurel (*Kalmia Latifolia*) are characteristic growths of the Conglomerate soils. (See page 16.)

Transportation and Commerce

Triple Mountain Barrier on Southeast.

Along the eastern margin, Pine and Cumberland mountains, extending as they do beyond the State line into Virginia and Tennessee, and capped with towering cliffs of Conglomerate, together with Black Mountain, form not only a triple barrier cutting off access into the Great Valley, but, by walling in the upper Cumberland basin, render that section practically inaccessible except at a few gaps.

Passes.

Northeast, Big Sandy River and Kanawha Gorge.

To the northeast, the Big Sandy River, with its eastern branches interlocking with the New-Kanawha system, affords passage via the Kanawha Gorge[a] into the Great Valley.

Southeast, Pound, Pineville, Cumberland Gaps.

To the southeast, the practicable points of connection are (1) Pound Gap, affording egress through Pine Mountain, whence there is passage through the Cumberland via Big Stone or Pennington gaps, and (2) the gap at Pineville, sixty-five miles distant, opening a way to Cumberland Gap and the Tennessee Valley.

Four Main Transmontane Routes.

Controlled by trend of ridge, course of stream, and location of gaps, four main transmontane routes of travel and commerce have been developed within the region, connecting the strategic passes on the east and west.[b] As paths of least resistance, these routes, with their tribu-

[a] In West Virginia the New-Kanawha River and in Tennessee the Tennessee River have cut their way across the coal field to the Ohio, and the narrow gorges of these streams have afforded passageway between east and west, both for highway and railroad. In the intervening distance the streams are indigenous to the plateau, and outlet eastward is by means of gaps high in the mountain barriers.

[b] Near the entrances of these routes into Central Kentucky, towns have grown up. Mt. Sterling is situated near important gaps in the Licking-Big Sandy divides. Mt. Vernon, near Crab Orchard Gap, is in close proximity to gaps in the Kentucky-Cumberland divides. Richmond, in Madison County, is near gaps between the southern tributaries of the Kentucky River. (See map, p. 98.)

taries—at first but trails beaten through the forest by buffalo and Indian and later followed by explorers and hunters—have formed the basis for the present highway system.[a]

Basis of Present Highway System.

In 1775 Boone marked the first white man's highway through the mountains. Before that time, as is shown by the records of explorers and travelers in Kentucky, from the earliest[1]—those of Walker and Gist, 1750 and 1751—to the McAfee Journals[2] of 1773, the region was covered with a network of trails, pointing the way to mountain pass, grassy valley, and salt lick.

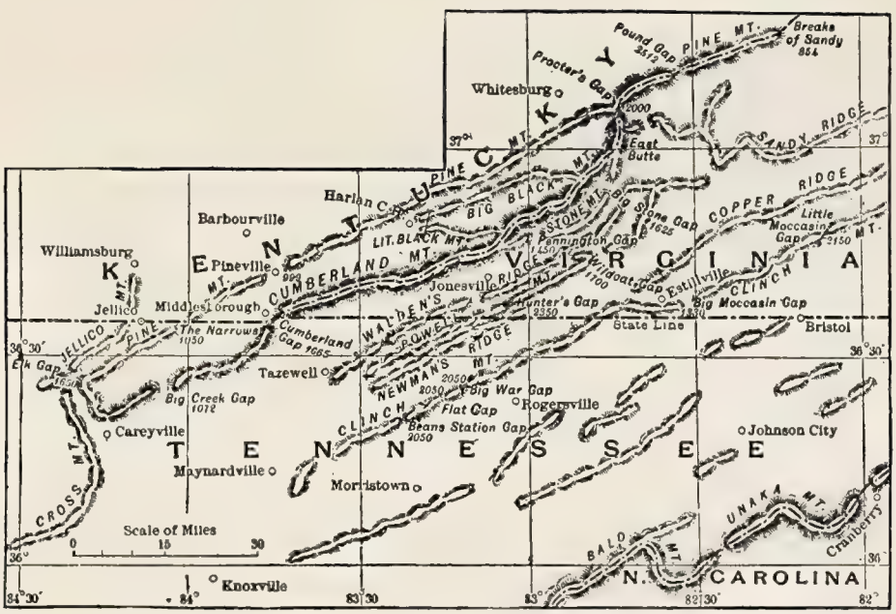
The buffalo traces,[b] which followed the ridge rather

[a] The main rivers have always been avoided when possible, because the swift currents render crossing difficult. The ridges at crest are in general too narrow and broken for passage, although in places long stretches of flat tops or terraced sides have been utilized. Hence, for the most part, highways are confined to the smaller valleys. Here the flat bottom-land can be traveled with ease, although frequent crossing of the stream is necessitated by the alternation of the bottoms with vertical banks. (See page 12.) Numerous shoals and riffles, however, offer excellent fords, and often for a considerable distance the horizontal structure of the rocks make of the stream a natural road-bed, comparatively smooth.

[b] According to Shaler, buffalo (a name applied to the American bison by the pioneers) began to enter Kentucky from the west five to ten centuries ago. (Shaler, History of Kentucky, p. 46.) By 1792 these animals were found only on the headwaters of Green River and in the mountains, on the Licking and Big Sandy rivers. (Imlay, Top. Desc., p. 100.) Soon after that date they entirely disappeared. (McMurtrie, Sketches of Louisville, p. 58.)

"Whenever the ramification of those roads (buffalo traces) begins to concenter it is almost an infallible sign that a salt lick is near. Those animals, resorting to them throughout the temperate part of the year for the benefit of the salt, make large roads, which leading from the lick, branch different ways into the country." (Imlay, p. 137.)

"The amazing herds of buffalo which resort thither (the salt licks) by their size and number fill the traveler with amazement and terror, especially when he beholds the prodigious roads they have made from all quarters, as if leading to some populous city: the vast space of land around these springs desolated as if by a ravaging enemy, and hills reduced to plains; for the land near those



Passes of Pine and Cumberland Mountains.

Buffalo Traces and Indian Trails.

than the stream, were broad and deep. Indian trails,[a] on the contrary, kept to the water-courses, were narrow, seldom over fifteen inches, as the Indians traveled single file, and were but slightly depressed. These trails, both buffalo and Indian—roads in embryo—stretched at times for miles over hills and through valleys in straight lines, but in general they turned and wound about in all directions without apparent reason.

springs are chiefly hilly." (Filson: Discovery, Settlement, and Present State of Kentucky.)

"The roads opened by these animals in their progress through the woods may be reckoned among the natural curiosities of the State, being generally wide enough for a carriage or wagon way, in which the trees, shrubs, etc., are all trampled down and destroyed by the irresistible impetus of the mighty phalanx." (McMurtrie, p. 58.)

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[a] Indian trails have been classified as hunting, war, portage, and trade routes. In the mountain region the old thoroughfares have not been sufficiently traced for sharp distinctions, but the best known were war trails. Hulbert describes a warpath as a "deeper, wider, harder trail than any other early Indian thoroughfare, flanked by a thousand secret hiding-places and lined with a long succession of open spots where warring parties were wont to camp." (Hulbert: Historic Highways, Vol. II, pp. 49–50.)

Gist in 1751, striking a "warrior's road" which probably crossed the watershed between the Red River and the North Fork of the Kentucky, found there "a large Warrior's Camp, that woud contain 70 or 80 Warriors, their Captain's Name or Title was the Crane, as I knew by his picture or Arms painted on a Tree." (Johnston: First Explorations of Kentucky, p. 155.) According to the deposition of Simon Kenton, June 5, 1824, "War roads were distinguished by the marks and blazes upon them, frequently the rough drawing of wild animals, or the sun or moon; and by their being leading roads, leading from one distant point to another." (Collins, History of Kentucky, Vol. II, p. 466.)

The early white travelers encountered many difficulties in following these trails. They often found it necessary, with hatchet or tomahawk, to clear their passage of fallen trees and underbrush. They were forced to ford the streams or to cross them on logs, or in canoes built for the purpose. Most of the excursions were made, therefore, in the summer and fall, when the streams were low. Most of the trails were fairly well "watered," but there was scarcity of food for man and beast. It was possible to use horses on the trails, but travel was chiefly on foot.

Main Trails Transmontane.

The main trails were all transmontane. The buffalo, in search of salt springs and pasturage, found the best supply to the east and west in regions which he connected with his traces. The Indian trails[a] were connecting

And Led into Appalachian Valley.

links between vast systems of thoroughfares to the east and west of the mountain region, the whole forming a complicated maze which "extended from ocean to ocean, and from the southern part of Patagonia to the country of the Eskimos." The center of the Southern system on the

[a] There was no Indian occupancy of the mountains during this period, except perhaps for a short time at a small village on the Ohio, opposite the mouth of the Scioto River. The trails were used by the neighboring Indians, who claimed the land in common. Just how long the Indian trails had been established here is unknown. There have been found along the main routes mounds, burial grounds, and other remains, which, long deserted and showing a higher civilization than was possessed by the tribes known to the early explorers, indicate an ancient origin, perhaps of two thousand years ago. They probably therefore antedate the buffalo traces. (Shaler, History of Kentucky, p. 46.)

These remains have been noted as follows—

In the Cumberland Valley: Bell County, mound near Cumberland Gap; Knox County, five groups on Cumberland River and near Barbourville; Whitley County, six groups, numerous mounds; a town on Cumberland River above Williamsburg, with 20 houses, and teocalli 360 feet long, 150 feet wide, and 12 feet high; remains of towns with houses on the waters of Laurel River and Watts Creek; Pulaski County, two groups, stone mounds on Pitman and Buck creeks; Rockcastle County, a stone grave (?) 200 feet long, 5 feet wide, and 3 feet high, near Mt. Vernon; Harlan County, mound at Mt. Pleasant (Harlan).

In the Kentucky Valley: Clay County, mound groups near Manchester; Perry County, a long drome near Hazard; Jackson County, mounds on the South Fork of Station Camp Creek.

In the Big Sandy Valley: Johnson County, two mounds in the bend of the river three-quarters of a mile southeast of Paintsville.

On the Ohio River: Boyd County, mounds at Ashland; Greenup County, ancient works opposite and above Portsmouth, Ohio; mound opposite Portsmouth; earthworks opposite old mouth of the Scioto.

(Lucien Carr, Memoir on the Mound-Builders, in Memoir of the Kentucky Geological Survey, 1883. Collins, History of Kentucky. C. S. Rafinesque, Ancient History, or Annals of Kentucky, 1824. Catalogue of Prehistoric Works East of the Rocky Mountains, Smithsonian Institute, Bureau of Ethnology, 1891. Bennett H. Young, Prehistoric Men of Kentucky, pp. 31, 145, Filson Club Publications No. 25.)

east was a warpath stretching north and south throughout the length of the Appalachian Valley.[3] The main trails of Eastern Kentucky connected with this great thoroughfare, and formed the four master routes to which all other trails were tributary.

Cumberland Gap Trail, or "Warrior's Path."

Chief of these was the Cumberland Gap Trail, or the Kentucky "Warrior's Path." Pownall's map[4] of 1776, based on that of Lewis Evans published in 1755, marks the greater part of the Cumberland Plateau as a section of the "Ouasioto Mountains." A "warpath" is given, extending southeastward across the region from the Red River, of the Kentucky basin, designated "Warrior's Branch," across the upper Kentucky River, "Cutawa River," and up one of its southern tributaries which is thought to be the present Station Camp Creek,[a] on to the south.

"Ouasioto Gap."

In Evans' text (published by Pownall in 1776) this trail, referred to as extending through "Ouasioto Gap," is marked on the map "An important Pass." Cumberland Gap is not given on Pownall's map showing the course of the trail. Walker, however, in 1750, and numerous later travelers, found a well-beaten "Indian Road" leading up the north bank of the Cumberland River to Cumberland Ford, where the river was crossed, thence through the

[a] An Indian camping ground on the banks of Station Camp Creek, near the mouth of Red Lick Creek, in the early settlement of the State, gave name to the creek. (Collins, Vol. II, p. 167.) According to Haywood, the name was given the creek by a party of white hunters who camped there. (Haywood, History of Tennessee, pp. 78–79.) An earlier name was probably "Hunting Creek." The upper Kentucky River was known as "Milley River." (Johnston, First Explorations, p. 63.)

gap at Pineville and on to Cumberland Gap. Here there were two principal trails into the Appalachian route; one passing via Powell Valley and across Wallens Ridge and Powell and Clinch mountains to a connection at Moccasin Gap[5]; the other, a short cut and less important, extending through the valley of Clinch River, gaining the main trail at New River.[a]

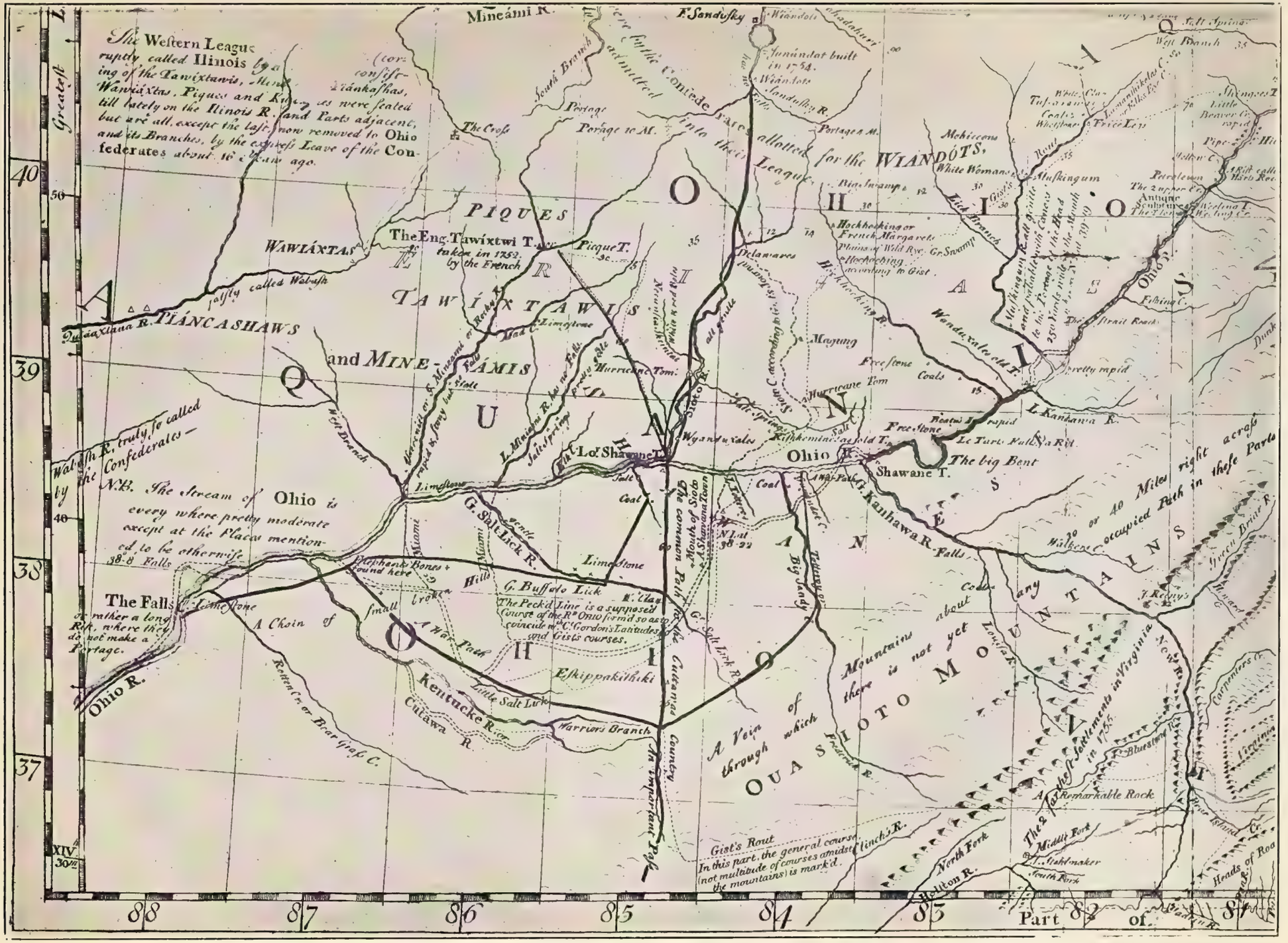
Western Branches from Southern Extremity.

From the southern extremity of the main trail numerous extensions ran westward, none of which are given on Pownall's map. Of chief importance to white travelers was a buffalo trace, which left the Cumberland River and "Indian Road" near Flat Lick, Knox County, ran along the broad divides between the Laurel and Rockcastle rivers, crossed the Rockcastle to Dick's River, a branch of the Kentucky, passed through Crab Orchard Gap[6] to Salt River, and thence to the Falls of the Ohio near the present site of Louisville.[b] A branch near Rockcastle River, crossing that stream at a higher point, descended via Otter Creek to the Kentucky River, and extended through the Bluegrass to the present site of Lexington.[c]

[a] Known as the "Hunter's Path" and "Long Hunters' Road." (See the McAfee Journals, August 13–14, 1773; Woods-McAfee Memorial, pp. 437, 459–473; Ramsey, History of Tennessee, p. 68.) The trail left the main Cumberland Gap route near the present site of Jonesville, Virginia, about thirty-nine miles from the gap. For condition in 1775 see Journal of William Calk, March 24-April 4, in Speed's Wilderness Road, pp. 34–35.

[b] Traveled in 1774 by Daniel Boone and Michael Stoner, who completed a tour of eight hundred miles in sixty-two days. (Autobiography of Colonel Daniel Boone, in Filson's "Kentucke," Appendix.)

[c] There were also extensions leading down the Cumberland Valley on both sides of the river. Walker, in 1750, from Cumberland Ford passed down the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Coal
Limestone
Limestone
Hills
Hills
Hills

Northern Extensions.

From the northern extremity of the main trail, at the crossing of Red River, Pownall shows three extensions, all designated "warpaths" on his map. One leads due northwest to the Big Bone Lick (now in Boone County), near the Ohio River. Another runs northwest across the headwaters of the Licking River to the Big Sandy, marked "Totteroy" on the map, crosses it at some distance from the mouth, and reaches the Ohio at the mouth of the Guyandotte River (in West Virginia). The third leads due north, crossing the upper Licking River, "Great Salt Creek," at some distance above the Blue Licks, "Great Buffalo Lick," thence passing to a "Shawana Town" on the Ohio, opposite the mouth of the Scioto River, and crosses the Ohio to the "Lower Shawane Town." Here it falls into the "Great Scioto Trail," which, connecting numerous Shawnee villages along the Scioto River, terminates at Fort Sandusky on Lake Erie. It is to this connection with the "Great Scioto Trail"[a] that the importance of the main trail, or Kentucky "Warrior's

Extension to "Great Scioto Trail."

Importance of "Warrior's Path."

south side of the river a considerable distance (fifteen miles below Pineville). (Johnston, First Explorations, pp. 50–52.)

In 1769 the "Long Hunters," from North Carolina, passed through Cumberland Gap and followed the Cumberland from Flat Lick, nine miles above Barbourville, down stream across the South Fork to what is now known as "Price's Meadows," about six miles from Monticello, Wayne County. (Collins, Vol. II, p. 417.)

In 1767 a party of hunters from South Carolina, passing through the gap, traveled to Rockcastle River, which was named by one of them "from a romantic-looking rock through the fissures of which the water dripped and froze in rows below." They proceeded down the river to its junction with the Cumberland, and down the Cumberland as far as the mouth of Stone River in Tennessee. (*Ibid.*)

[a] One of the most important trails, both in peace and in war, in the West. The main route for the Sandusky-Virginian fur trade. The old-time "warpath" through the mountains to the Cherokee country of the south. Main route of invasions of Kentucky and for the invasions of the Indian country from Kentucky during the Revolutionary War. (Hulbert, Historic Highways, Vol. II, p. 113.)

Path," both to white men and Indians, seems originally to have been due. On the Pownall-Evans map the "Ouasioto" trail and its northern extension are marked "The Common Path to the Cuttawas Country." A significance thus gained as an intercontinental route was noted by Evans in the text accompanying the map of 1755 published by Pownall[7]:

An Inter-continental Route: Importance Noted by Evans. (1755.)

"This river (Sandusky in Ohio) is an important Pass, and the French have secured it as such; the Northern Indians cross the Lake here from Island to Island, land at Sanduski, and go by a direct Path to the Lower Shawane Town, and thence to the Gap of Ouasioto on their Way to the Cuttawas Country. This will no Doubt be the Way that the French will take from Detroit to Moville (Mobile), unless the English will be advised to secure it, now that it is in their Power."[a]

[a] Later the mouth of the Scioto lost its significance as a point on this route.

Filson's map of 1784 (in the Library of Congress) gives the "Warrior's Path" as extending from Red River across the Kentucky at the mouth of Cow Creek (near Irvine, Estill County) up Station Camp Creek, across the Cumberland-Kentucky watershed to the Cumberland River at Buffalo Creek and Flat Lick, and thence up the river and its branches to Cumberland Gap. But one northern extension is given, and it differs materially from any on the Pownall-Evans map. From Red River it leads to the northwest; after skirting the mountain region and crossing the Licking at the "Upper Blue Licks" it runs cross-country to "Cabbin" Creek, which it descends to the Ohio. There is no connection with the mouth of the Scioto, the trail continuing across the Ohio to the northeast, where it terminates in Indian settlements on the upper Scioto, one at Paint Creek and one designated the "Mingo Nation" farther north.

From Simon Kenton's deposition of June 5, 1824: "The Mouth of Cabin Creek (5½ miles above Limestone creek, or Maysville) was a noted crossing place for war parties of Indians over the Ohio River. Two roads led out to the Upper Blue Lick—one always known as the *upper war* road, the other sometimes called the *lower war* road, but generally the buffalo road or trace; the former was best known, most distinctly marked in its whole length, and oftenest travelled except in the most active Indian times, when it was avoided for fear of them." (Collins, Vo. II, p. 566.)

Nevertheless there continued to be connection with the mouth of the Scioto by means of branches from the main trail. The Durrett-Harvard copy of the

Again[8]: "Its (Kentucky River) Navigation is interrupted with Shoals, but passable with Canoes to the Gap, where the War Path goes through the Ouasioto Mountains. This Gap I point out in the Map as a very important Pass, and it is truly so by reason of its being the only Way passable with Horses from Ohio Southward, for 300 or 400 Miles Extent. And if the Government has a Mind to preserve the Country back of Carolina, it should be looked to in Time."

Intersection with Kentucky River of Significance.

The intersection of the trail with the Kentucky River doubtless increased its importance to the Indians. This is shown in Schoolcraft's[9] description of Indian trips into

Filson map, also dated 1784, but thought to be later than that in the Library of Congress, gives the "Warrior's Path" with the northern extension via the Blue Licks, but adds a branch, which leaves the main line near the head of Station Camp Creek, runs due north, crosses the Kentucky above the main trail near the mouth of Miller's Creek, passes across the headwaters of the Red and the Licking rivers, crosses the Ohio, and reaches the "Old Shauane Town" at the mouth of the Scioto. (See map in Filson Club Publications No. 1 and in P. Lee Phillips, The First Map of Kentucky. 1908.)

A map published by the Federal Land Office in 1908 shows a trail as the "Warrior's Path," crossing the Kentucky River at a still higher point. This trail is identical with the other described from Cumberland Gap to Pineville, but from that point it extends down the headwaters of the South Fork of the Kentucky to the vicinity of Manchester, in Clay County, then leads northeast, crossing the Middle Fork of the Kentucky and the North Fork above the junction at Beattyville, over the divides between the Kentucky and Red rivers, past West Liberty to the Little Sandy River, which it follows; passing Sandy Hook, Elliott County, and Grayson, Carter County, on to the mouth of the Scioto. This is one of the few feasible north-and-south routes in the region, and probably was intersected by a number of trails in the Kentucky-Red River divide, where the passes are especially favorable. According to Ky. Geological Survey, 1859 (Vol. IV, p. 532): "At the head of Lower Devil Creek the dividing ridge is much depressed. It was through this gap that the original inhabitants passed on their journeys between the Red and Kentucky rivers. The old Indian trace through Spruce Gap is even now considered the best route between the two streams."

This pass was probably a branch of the "Warrior's Path" as given by Filson, and not the main trail. Unfortunately no record was kept by the Land Office

Kentucky: "They landed at secret points, as hunters and warriors, and had no permanent residence within its boundaries. . . . At an early day the head of the Kentucky River became a favorite and important point of embarkation for Indians moving in predatory or hunting bands, from the South to the North and West. The Shawnees, after their great defeat by the Cherokees, took that route, and this people always considered themselves to have claims to these attractive hunting-grounds."

Warrior's Path and Branches much used by Early Explorers and Hunters.

The "Warrior's Path,"[a] with its western branches, became the most frequented of all routes in Kentucky by white travelers, hunters, and explorers, because of its advantageous situation in regard to settlements on the east

of the authorities upon which the map was based. (Private letter from the Chief Clerk, Washington, October 25, 1909.) It may have followed Collins. ". . . John Findlay . . . who, in 1767, . . . came along a route called the warrior's road or path (it is delineated on the map in Filson's Kentucky, published in 1784 at Wilmington, Delaware), 'leading from the Cumberland ford, along the broken country lying on the eastern branch of the Kentucky river, and so across the Licking River toward the mouth of the Scioto.'" (Collins, Vol. II, p. 494.) The description is misleading, however, unless there were a third edition of Filson's map which differed from the other two.

The decline in importance of the mouth of the Scioto as a point on this route was probably due to a constant shifting of the Indian population as white settlements advanced westward. There is uncertainty as to the length of time Indian villages existed at that point. Evidence seems to show that there was a village on the Ohio side as early as 1739 at least, and that later a less important one was established on the Kentucky side, which was noted by Gist in 1750. The settlements were mentioned by Evans: "Opposite the Mouth of this River (Scioto) is the Lower Shawane Town, removed from the other Side, that was One of the most noted places of English Trade with the Indians." After 1758, when, according to tradition, the Shawnees moved to the "upper plains of the Scioto" for security during the French and Indian War, there were probably no settlements on the Ohio side, and none of consequence opposite in Kentucky. (Johnston, First Explorations, p. 128.)

[a] The Indian name was "Athiamiowee." (Speed's Wilderness Road, p. 70.)

and because it afforded greater ease of travel than on the more northern and rougher routes. Walker, in 1750,[a] entering through Cumberland Gap,[b] followed the main trail as far as the crossing of the river near Pineville. Findlay, alone in 1767, and again with Boone in 1769, traveled the same way as far as Red River.[10] Collins and other historians enumerate a long list of excursions made between 1769 and 1775, on the main trail and its extensions, to and from Central Kentucky.

Big Sandy Trails.

Next in importance to the "Warrior's Path" was a Big Sandy trail with its tributaries, which connected with the Appalachian thoroughfare by means of the old "War Trail[c] of the Nations" through the Kanawha Gorge. The main route—the one most used by the Indians—led up the Big Sandy and for some distance up Tug Fork, via the Salt Springs in the vicinity of Warfield, Martin County,

[a] The main trail and some of its branches had probably been traveled before by white hunters and traders. (Johnston, First Explorations, p. 41.) Walker's Journal indicates that he had been furnished information as to routes in the region. (*Ibid*, pp. 57, 41.) He found, moreover, at Cumberland Gap, "Laurel Trees marked with crosses, others Blazed and several Figures on them." (*Ibid*, p. 49.) Some distance down the Cumberland, at the mouth of Patterson's Creek, he also found "blazes" and trees marked with initials. (*Ibid*, p. 54.)

[b] For the name Cumberland, given by Walker to the River and Gap, see Johnston, pp. 50, 48.

[c] The main trail, which descended the New-Kanawha River to the Ohio, was formed by a plexus of trails from the headwaters of the James River. Chief among these was one leading through the valley of the Greenbrier River, a tributary of New River. From the mouth of the Kanawha the main trail, crossing the Ohio River, passed via the Scioto-Hocking watershed to the Great Scioto Trail. An important point was the Salt Springs, about five miles above the present site of Charleston, West Virginia, near the falls, the head of navigation on the Kanawha. (Hulbert, Vol. II, pp. 92, 112; Hale, Trans-Allegheny Pioneers, p. 102.)

probably to Trace Fork of Pigeon Creek. Here it connected with a cross-country trail leading to the falls of the Kanawha, where it met the "War Trail of the Nations" and passed by means of its Greenbrier extension to the upper James River.[a] This was the most direct path from the Scioto villages to the Catawbas of North Carolina, and was the warpath of the Shawnees when making incursions into that territory.[11]

Greenbrier Route.

Trails up Tug and Louisa Forks.

Branches of the main trail passed up both forks of the Big Sandy to headwaters. The Tug Fork trail extended into Abbs Valley, a favorite hunting-ground of the Indians,

[a] This was probably the route taken by General Andrew Lewis in 1756, with a company of 150 Cherokee warriors and 184 white soldiers, on an excursion of retaliation against the Shawnees north of the Ohio for numerous raids on settlements west of the Blue Ridge. The following description is erroneous as to date and as to the place where the campaign ended, which was the mouth of the Big Sandy: "The destruction of the Roanoke settlement in the spring of 1757, by a party of Shawnee Indians, gave rise to a campaign into the region of country just east of the Big Sandy river called by the old settlers 'the Sandy creek voyage.' This expedition was for the purpose of punishing the Indians, and to establish a military post at the mouth of the Big Sandy, to counteract the influence of the French at Gallipolis with the Indians. It was composed of four companies, under the command of Col. Andrew Lewis. . . . The party were ordered, by a messenger from Gov. Fauquier, to return. They had then penetrated nearly to the Ohio River, without accomplishing any of the objects of their expedition. When the army on their return arrived at the Burning Spring, in the present limits of Logan County, Virginia, they had suffered much from extreme cold as well as hunger; their fear of alarming the Indians having prevented them from either hunting or kindling fires. Some buffalo hides which they had left at the spring on their way down were cut into tugs or long thongs, and eaten by the troops, after having been exposed to the heat from the flame of the spring. Hence they called the stream near by, now dividing Kentucky from Virginia, *Tug River*, which name it yet bears. Several who detached themselves from the main body, to hunt their way home, perished. The main body, under Col. Lewis, reached home after much suffering; the strings of their moccasins, the belts of their hunting-shirts, and the flaps of their shot-pouches, having been all the food they had eaten for several days." (Dinwiddie Papers, Vol. II, pp. 200, 293; Collins, Vol. II, pp. 459–460; Johnston, First Explorations, p. 70.)

and met the New-Kanawha trail by way of the upper Clinch and Bluestone rivers, while among numerous branches one led up Dry Fork to Roark's Gap, near Maxwell in Tazewell County.[12]

The Louisa Fork trail followed the stream to its head and gained the Clinch Valley trail near Tazewell Court House at the head-forks of the Clinch River.[13] Branching from this were numerous side trails leading to points of egress in Pine and Cumberland mountains,[a] as for example one passing up Shelby Fork toward Pound Gap.[14]

Intersection of Cross-country Trails.

Numerous trails led from the "Warrior's Path" to the forks of the Big Sandy. The best known extended from the crossing at Red River up that stream and its branches to the headwaters of the Licking. Gaining the Louisa Fork trail near Paintsville, Johnson County, it passed to Tug Fork and a connection with the Greenbrier route. This trail was taken by Walker in 1750,[15] and is probably the same as that given on the Pownall-Evans map with an extension to the mouth of the Guyandotte and Kanawha rivers.[b]

Route taken by Walker Best Known.

Pownall gives as a warpath a route which passed from Big Bone Lick to the mouth of the Scioto and thence through

[a] These upper trails, when discovered by the whites, had evidently been used but recently by the Indians. "The principal Indian trails in Tazewell County led through (up and down) the Clinch valley, but after the whites began to settle and the Indians moved west, the trails all led up from the Ohio river." (Bickley, History of Tazewell County, pp. 191–192.)

[b] Simon Kenton and several companions from Virginia, in 1773, having passed down the Ohio to the mouth of the Big Miami, destroyed their canoes and went "through the country to Greenbriar County," Virginia. (Collins, Vol. I, p. 17.)

the flat country back of Ashland, Boyd County, to the mouth of the Big Sandy,[a] and along the Ohio to the mouth of the Kanawha.

There was also a trail from the mouth of the Big Sandy which, leading past the present site of Barboursville, West Virginia, at the junction of the Mud and Guyandotte rivers to the mouth of Coal River and on up stream, connected with the New-Kanawha trail at the falls of the Kanawha.[16]

Other Trails converged at Mouth of Big Sandy.

There were other Kentucky trails which converged at the mouth of the Big Sandy. The principal ones probably led by way of the salt springs, in the upper Little Sandy Valley.

Big Sandy Routes not Well Recorded.

The Big Sandy routes, rough and exposed to constant attacks by Indians, were but little used by the early travelers and settlers, and have not, in consequence, been well recorded.

Pound Gap Trails.

Converging at Pound Gap there was a plexus of trails, of which two were the best known.

Gist's Route.

One was traveled by Gist in 1751 on his return to Virginia from Kentucky. It led from the Red River, by way of the Kentucky-Red River divides, to the North Fork of the Kentucky and up stream to Pound Gap.[17]

[a] This was the route taken by Mrs. Mary Inglis and her companion in 1756, when, escaping from Indian captivity at Big Bone Lick, she returned to "Drapers Meadows" (Blacksburg, Virginia) on New River. The two travelers found that the Big Sandy, swollen at the time, was not fordable at the mouth, so they ascended the stream for "two or three days," until, having found a crossing, they again turned to the Ohio. (W. H. Foote, Sketches of Virginia, second edition, pp. 150, 159.)

Kentucky River Trail.

The other, the Kentucky River trail, was taken by the McAfee brothers in 1773 on their way to Virginia. Starting from Harrodsburg on Salt River, the trail led past Richmond, through a gap in Big Hill to Irvine on the Kentucky River and then up stream to the junction of the three forks (near Beattyville) and up the North Fork and its tributaries as far as Leatherwood Creek (or a creek in the vicinity) in Perry County. Here the McAfees left the main trail, which continued on to Pound Gap, and followed a branch, probably leading to Hurricane Gap in Pine Mountain and on to Clover Fork of Poor Fork of the Cumberland, where they discovered some "big Elk Licks," and "very big paths" which ran "into the north side of an exceeding high mountain." Crossing Black and Stone mountains to Powell's River, they finally gained the Clinch Valley trail.[18]

Trails Not Well Known.

The upper portions of these trails and their tributaries were, like those of the Big Sandy, but little known to the whites, and information concerning them is scant.[a] They

[a] A young Englishman who visited southwest Virginia before 1775, in a letter written from Stalnaker's Settlement on Holston River, refers probably to Pound Gap or a pass in its vicinity: "Here we gained intelligence of a nearer way to Kentucky than that commonly made use of, which had very lately been discovered, viz: by crossing Clinch River about sixty miles from Stalnakers, going over the great ridge of the Alleghany or Appalachian Mountain at a gap which had been used only by a few of the best hunters, and falling down on the 'Warriors's' branch, a river that runs into Kentucky." (Summers, History of Southwest Virginia, pp. 93–97.)

Another branch is referred to by Collins (Vol. II, p. 413) as taken by Indians in 1792, which led up from Powell's Valley, not far from Cumberland Gap, through "Stone Gap" to a "noted Indian crossing-place high up on the Kentucky River." See also the letter of Benjamin Sharpe in American Pioneer, Vol. II, pp. 467–568.

Extensions.

were connected with the main Appalachian trail by a number of paths which led eastward from Pound Gap. One of these, passing near the place where the railroad station at Norton is now situated, led down Guest's River and met the main trail near Abingdon, Virginia. Another passed through Big Stone Gap and "Cracker Neck," leading due southeast over Powell's Mountain into the main trail.[19] Still another extended down Guest's River and up the Clinch to the Bluestone and thence to the New-Kanawha trail.[20]

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CHAPTER III

1775–1792—Virginia Roads

Transmontane Routes Important for Immigration and Travel.

Indian hostility rendered futile all attempts to found colonies in Kentucky until 1775. But in the spring of that year settlers began to come in great numbers, and in spite of Indians and the Revolutionary War they came to stay.[a] The first homes were established in the Bluegrass, where the danger of Indian attacks from the north concentrated the population in the south-central part. Soon after 1783, however, the region near the Ohio became the most sought after, and the largest towns and villages were located there. Until the last decade of the eighteenth century no settlements were made in the mountains, which to these immigrants from the east were but a rugged barrier to be passed over in order to reach the fertile limestone plains.[b]

Highways within the mountain region from 1775 to 1792 were of significance, therefore, only as western exten-

[a] In May, 1775, there were some three hundred settlers, who had about 230 acres of land in cultivation. (Butler, History of Kentucky, second edition, p. 30.)

In 1779 the enactment of the Virginia Land Law stimulated the western movement, and after that year there was a heavy immigration. Monette estimates for 1783 a population of 12,000. By 1790 it was 73,677, and by June, 1792, 100,000. For the greater part of the period the immigration averaged at least 5,000 souls per annum. One writer estimates this average at about 2,700 during the nine years from 1777 to 1786, and about 12,000 from 1786 to 1790. (R. M. McElroy, Kentucky in the Nation's History, pp. 147–148, 1909; Shaler, History of Kentucky, pp. 80, 108.)

[b] Indian hostility was an important factor in retarding the settlement of the mountain region. "In the year 1789, Charles Vancouver settled in the

IMLAY'S MAP OF KENTUCKY, SHOWING COUNTIES IN 1793 AND THE VIRGINIA ROADS.

sions of roads leading from the seaboard across the Appalachians to the Ohio Valley, whither immigration was tending. They were of great importance to the Bluegrass settlements and to the mother colony, Virginia, with the common seat of government at Richmond, which they thus helped to connect. The overland routes were little used for commerce; the small amount of traffic then existing was carried on, for the most part, by means of the Ohio River in a trade circuit around the region.[a]

Little used for Commerce.

Much of the travel into Kentucky was also by boat down the Ohio. But during the Revolution, and for some time after, such travel was dangerous both because of Indian attacks and the difficulties incidental to navigation—numerous floods and swift currents. Moreover, boats

River Travel Dangerous and Expensive.

forks of Big Sandy, and employed ten men to build a fort and cultivate some corn. This settlement lasted but a year, as the Indians in a few weeks after Vancouver took possession stole all the horses, and continued to be troublesome." (Collins, Vol. II, p. 460.)

"Magoffin County was first settled about 1800, by emigrants originally from South Carolina—John Williams, Archibald Prather, Clayton Cook, Ebenezer Hanna, and a few others. Some of them had previously attempted a settlement in 1794, but were driven back by the Indians. The first permanent settlement was made one mile below Salyersville, at Licking Station—so called from the Indians having once temporarily occupied it. It is in a bend of Licking River, the land nearly in the shape of a horseshoe, and is admirably suited for an Indian fort." (Collins, Vol. II, p. 536.) Collins notes a settlement also in the present boundaries of Clay County, made by James Collins in 1798 upon the headwaters of Collins Fork. (Collins, Vol. II, p. 141.) Imlay's Map of Kentucky, 1793, shows "Settlements" on a fork of Red River, one along the Wilderness Road on Rockcastle River, "Vancouver's Station" at the forks of the Big Sandy, and "Harman's Station" on the upper Louisa Fork.

[a] The first store of the colony was opened at Boonesborough, July 1, 1775. "The extent of its business and variety of its stock of goods is not known." (Collins, Vol. II, p. 523.) The second store was opened in 1783, at Louisville, and the third in Lexington the following year. Eastern importations were taken over-

were scarce and expensive. Consequently a land route, although longer, was preferred by many. For all return travel the mountain paths offered the only practicable way.[8]

Two Transmontane Routes, connecting with the Great Valley, improved.

The improvement of two of the transmontane trails, as routes of immigration and travel, became the object of legislation by the General Assembly of Virginia. For the first time in Kentucky there came to be at least the semblance of an "improved" highway. These roads, as was the case with the original trails, connected with the old main route in the Great Valley, which, leading from Philadelphia, with an important branch from Richmond, Virginia, and passing down the Holston Valley, had become an artery of pioneer commerce and travel[1] from east to west. To extend this route to Central Kentucky and there

land from Philadelphia or Baltimore in wagons to Pittsburgh, Wheeling, or other points, and thence by boat down the Ohio to Kentucky. Lexington was the center of supply; the goods, after landing at Limestone, were brought thither via an old Indian road. It was a mere trail until 1783, when it was improved by private enterprise. By 1787 it had become a thoroughfare over which a line of loaded wagons ran between the termini. At first the pioneer, with the aid of his family, supplied his own wants from farm products. The surplus was barely sufficient for the increasing immigration. Small quantities of hemp, the more valuable furs, and ginseng, were practically all of the eastbound exports. Some of these no doubt went overland. After 1783, as population increased and the surplus became greater, bulky farm products, salt, hides, and furs, sought cheap downstream transportation, which was made possible by the opening of the mouth of the Mississippi in 1783, and were shipped to New Orleans and sold. The proceeds were taken to the Eastern markets and there invested in merchandise, which was sent down the Ohio to the Kentucky storekeepers. (Johnston, Memorial History of Louisville, p. 244.)

[8] The return travel was considerable. Many of the pioneers came to Kentucky several times before making the final settlement. One man made the journey eleven times before remaining permanently. (Stith Thompson, Pioneer Roads to Kentucky, p. 93, Unpublished Manuscript, Durrett Library. Also, John Goss' Narrative, Draper Collection, Shane I, II.)

establish forts and settlements,[a] and to protect the travelers and laborers from hostile Indians,[b] was the task of the first road-builders. Before the close of the period the main highways to the east had been converted into wagon roads, but it is probable that almost up to the nineteenth century no wheeled vehicles passed over the Kentucky extensions. Here the improvements consisted in little more than marking the way along the old trails by "blazing" trees and clearing the passage of underbrush, which was easily accomplished in a forest broad leaved and peculiarly open beneath. Indeed the chief result attained, besides affording protection from the savage who crept through the woods "searching for wayfarers," was a "sagacious choice" of routes from the large number of trails.

Improved Routes mere Bridle Paths.

[a] Settlers along the highway were protected by a line of fortified villages or stations as far down as Moccasin Gap, in close proximity to which was a fort, which in 1775 probably marked the southern extension of fortifications along this route. The original fort was built in 1758; one farther south, about thirty miles from the present site of Knoxville, built in 1756, had been demolished by Indians. (Ramsey, History of Tennessee, pp. 59, 93.) In the autumn of 1776 wagons for the first time descended the road as far as Long Island. These were loaded with provisions for the fort (Patrick Henry) situated in the vicinity of Kingsport. (Ramsey, p. 57, note.) Beyond was the trail, passable only for horses and zealously guarded by the southern Indians. (See William Christian's march into the Cherokee country, 1776; Ramsey, pp. 165–168.) Branches of the old trail had also been fortified. Thus the "Long Hunters'" path in 1774 was bordered by forts, occupied by regular militia, from Stony Creek to the present site of Tazewell, a distance of ninety miles. (Shaler, History of Kentucky, p. 65; Summers, Southwest Virginia, pp. 156–157.)

[b] Indian attacks were frequent in Kentucky until after 1794, but until 1775 were only occasional, and more or less incidental, incursions by bands out on some war or hunting expedition. More organized assaults began with the first permanent settlements. For the first two years the warfare was of a desultory sort waged by predatory bands, but as the Revolution progressed the raids were instigated by the British; the bands were commanded by British officers, and the sieges and attacks may be classed among the actions of the Revolutionary

The Wilderness Road

Project for Road through Cumberland Gap undertaken by Private Company.

The Cumberland Gap route became the "Wilderness Road." The original project for this road was devised by a private company, which took upon itself sovereign powers without the consent of any government. Colonel Richard Henderson and a company of "eight other gentlemen from North Carolina," by a treaty with the Cherokee Indians consummated March 17, 1775, received, for the sum of ten thousand pounds lawful money of Great Britain, all of the territory lying between the Kentucky (Chenoca) and Cumberland rivers. This land, of about seventeen million acres, was to be held by them in their corporate capacity as "Proprietors of the Colony of Transylvania."[2]

Boone asked to Mark a Way.

Daniel Boone, who had made frequent visits to the territory thus acquired and who had but recently returned from a trip to the Falls of the Ohio, at the "solicitation" of these

War. From the south, in spite of the protection afforded by the settlements in the Tennessee Valley, there was considerable annoyance from the Cherokees, while against the northern Indians the colonists had no protection save what they themselves could furnish. George Rogers Clark's expedition, in 1782, against the Indian settlements in the upper Miami Valley, and peace with Great Britain in 1783, did much to end the deliberate invasions from beyond the Ohio. A succession of small raids continued, however, until Wayne's victory, August, 1794, practically terminated Kentucky's troubles with the Indians. (Shaler, History of Kentucky, pp. 73, 78, 109, 130; Collins, Vol. II, p. 761.)

Indian raids continued in the mountains after they had entirely ceased in the central part of the State. "The last recorded Indian depredations and murders in the interior of the State we copy from the Kentucky Herald of March 28, 1795: 'By a gentleman just from the salt-works we are informed that the Indians stole a number of horses from that place last week, and that they also killed a man on Goose Creek.'" (Collins, Vol. II, p. 141; Clay County.)

gentlemen, attended the Treaty of Wataga, and, according to his autobiography, "undertook to mark out a road in the best passage, from the settlement (Watauga)[a] through the Wilderness to Kentucky," with such assistance as he "thought necessary to employ for such an important undertaking." He soon "collected a number of enterprising men well armed," and work was begun.[3]

Boone's Trace.

The "trace" marked by Boone[b] led from the Watauga River in East Tennessee (Sycamore Shoals, Carter County) by way of Long Island to Moccasin Gap near Gate City, where it met the Big Road from Philadelphia and Richmond and extended along the old trail[c] to Powell's Valley, through which it passed to Cumberland Gap. From here Boone followed the "Warrior's Path" across the ford of the Cumberland, just below Pineville Gap, and down the Cumberland to Flat Lick. At this place he left the main trail

[a] Spelled "Wataga" in the original treaty. Butler, in his History of Kentucky, refers to it both as "Wataga" and as "Wataugah." (See History, second edition, pp. 37, 472–488; also early documents in Ramsey, History of Tennessee, pp. 119, 134.)

[b] In Kentucky the trace was "plainly visible" in Madison and Rockcastle counties as late as 1873, and until a short time before then had been observable in Laurel County, where it extended over the present site of the court house at London. (Collins, Vol. II, pp. 248, 516, 629.)

The "trace," as marked by Boone, was only a bridle path. Later, March 20th to April 1st, in Virginia it was cleared for wagons as far as Colonel Martin's station, which was twenty miles east of Cumberland Gap. (Henderson's Journal, March 31st.) The station had been established in 1768 by Colonel Martin and more than twenty companions, but had been overcome by the Indians soon after. It had been reëstablished by Martin, who was one of the two "attorneys" for the Indians appointed at the Treaty of Wataga "to give and deliver" the land to Henderson & Company, probably at Henderson's instigation and in order that it might furnish succor and protection to the colonists. (Butler, History of Kentucky, second edition; the Treaty of Wataga.)

[c] See p. 62.

and took the old Buffalo Trace which led cross-country to the Hazel Patch near Rockcastle River, and then continued up Roundstone Creek to a gap in Big Hill (Boone's Gap, two miles southeast of Berea) and on to Otter Creek and the Kentucky River, where Fort Boonesborough was built, near what is now Ford in Madison County.[4]

Boone's Company of Road-Makers.

Boone's company of road-makers was composed of thirty men; his brother Squire Boone, Colonel Richard Calloway, John Kennedy, and eighteen others, and Captain Twetty with eight men, who had joined him at Long Island. Boone acted as "pilot" and "conductor." The company started March 10, 1775, and proceeded "with all possible dispatch" to within fifteen miles of Boonesborough. Here hostile Indians caused delay and depletion of ranks: March 20th two men were killed and two wounded; three days later two men were killed and three wounded. The Kentucky River was reached April 1st, the road, over two hundred miles long,[a] having been opened in about three weeks time. The work, as far as Rockcastle River, consisted

Trace completed April 1, 1775.

[a] For a description of Boone's trace see Henderson's Journal; also Calk's Journal in Speed, the Wilderness Road. The distances on the trace were approximately as follows:

Sycamore Shoals to Long Island of Holston.	25 miles.
Long Island to Moccasin Gap	10 "
Moccasin Gap to Cumberland Gap	76 "
Cumberland Gap to Flat Lick	22 "
Flat Lick to the Hazel Patch	40 "
Hazel Patch to crossing of Rockcastle River .	10 "
Rockcastle River to Boone's Gap	20 "
Boone's Gap to Boonesborough	30 "
Total	233 "

(For details of route in Madison County see Collins, Vol. II, p. 525.)

in "marking the track with hatchets," and then for twenty miles the way was "cut" through a country "entirely covered with dead brash," a "difficult and laborious task." For the next thirty miles the path led through thick cane and reeds, and "as the cane ceased" the company "began to discover the pleasing and rapturous appearance of the plains of Kentucky."[5]

Compensation to Boone and Companions.

The exact inducement offered Boone and his companions is unknown. At a meeting of the Proprietors of the Transylvania Colony it was resolved that: "A present of two thousand acres of land be made to Colonel Daniel Boone, with the thanks of the proprietors for the signal service he has rendered to the Company."[6] The right of the Company to its holdings was, however, declared null and void by an act of Virginia, November 4, 1778, and although 200,000 acres were granted the Company by the State, Boone, according to his own testimony, received no recompense whatever.[7]

To Boone's companions the acquisition of land was probably the chief incentive. The average pay for working on roads was fifty cents a day.[8] Some of the indebtedness was paid in supplies from the Company's store, which was opened in April, 1775. On the ledger, Michael Stoner[9] was credited with ten pounds ten shillings for his work "making roads to Cantucke."

Logan's Trace.

Benjamin Logan, in 1775, met Henderson and his party in Powell's Valley as they, between March 20th and April

20th, were following Boone's trace into Kentucky. Because of a dispute with Henderson, Logan did not continue with him long, but left the main line near Rockcastle River. He turned to the west, and having crossed the Rockcastle near the mouth of Skegg's Creek[a] passed through Crab Orchard Gap, probably blazing his way as he went, and built his station, St. Asaph,[b] near the present site of Stanford.[10] His path, with the main line through Cumberland Gap, became the principal route to Kentucky. It is marked on Filson's map as "The Road from the Old settlements in Virginia to Kentucke thro' the great Wilderness." The trace from Rockcastle River to Boonesborough became a branch.[c] "Both . . . were great highways of pioneer travel. The one (Boone's trace) led to the heart of the Bluegrass region, where Lexington was built, and the other was the direct way from Cumberland Gap through

Became more important than Boone's.

Both much used.

[a] Also known to pioneers as "Scaggs" or "Skaggs Creek." The name was given it, probably, by Henry Skaggs, who hunted there before 1775. This was the old Indian trail described on p. 62. According to Collins, "Skaggs trace" was "plainly visible" as late as 1873 in Rockcastle County. (Collins, Vol. II, pp. 417–418, 692.)

[b] Logan was accompanied only by two or three slaves. It is not known exactly when the fort was erected. St. Asaph was, however, a fortified settlement by May, 1775. (Collins, Vol. II, pp. 501, 518, 483; Butler, p. 30.)

[c] See Filson's map (1784). The two roads diverged at Hazel Patch (near London, Laurel County). This point, important in the annals of the road, was famed for its nuts. "It was also an open place, a 'prairie,' as the pioneers called it, covered with low bushes." (Stith Thompson, Pioneer Roads to Kentucky, p. 72, 1911, Unpublished Manuscript, Durrett Library; see also Draper Collection, Shane I, 83, I, I, III, 15.) The difficulties of travel over both roads during this period are set forth in many pioneer records. The emigrants were "men on foot with their trusty guns on their shoulders, driving stock and leading pack-horses; and the women some walking with pails on their heads, others riding with children in their laps and other children swung in baskets on horses, fastened to the tails of others going before." Besides the pack-horses, other

Crab Orchard, Danville, Bardstown, and Bullitt's Lick to the Falls of the Ohio."[11]

Commissioners appointed by Virginia in 1779 to Construct the Road.

In October, 1779, the State of Virginia appointed two commissioners to explore the country "on both sides the Cumberland mountains, and to trace out and mark the most convenient road" from the "settlements on the east side" to the "open country" in Kentucky. The commissioners were directed to "cause such road" to be "opened with all convenient despatch" and to be "cleared in such manner as to give passage to travellers with pack-horses, for the present."[a] A report was to be made at the next Assembly as to the "practicability and charge" of rendering the same a "good waggon road." The reason was set forth that "great numbers of people" were "settling upon the waters of the Ohio river . . . in the county of Kentucky" and "great advantages" would redound from a "free and easy communication" with them. The expenses

Expenses to be Paid from State Treasury.

stock was brought along; sheep and cattle were driven in front, grazing at will. The hardships endured are graphically described, especially by those who traveled the road during the "hard winter" of 1779. Making but two or three miles a day, they were frequently in danger of being frozen, or killed by the falling of horses on the icy and almost impenetrable trace, and subsisted "on stinted allowances of stale bread and meat." "A number were caught in the Wilderness and could not get through. Some starved, for they could not live on meat without bread. One of those with stock went out to hunt and was gone five days without food." (See Wymore's Narrative, Shane I, 129, Draper Collection; Chief Justice Robertson's Speech at Ft. Madison, 1843; Thompson, Pioneer Roads to Kentucky, pp. 90, 91.)

[a] Travel beyond Boonesborough was facilitated after October, 1779, when an act of the Virginia General Assembly established a ferry at this point across the Kentucky River "to the land on the opposite shore." This, the first ferry established in Kentucky, was to be kept by Richard Callaway, his heirs and assigns. The tolls, which were to go to the keeper, were fixed at three shillings (fifty cents) for a man and the same for a horse. (Collins, Vol. II, p. 514.)

were to be paid from the State treasury, except the "wages and pay" of the laborers and militia guard, each of whom should for completed work receive one hundred and twenty pounds, or a "grant of three hundred acres" of any waste or unappropriated lands within the State. The commissioners were to be paid at a rate to be decided upon by the General Assembly. Because of probable danger from Indians, the commanding officers of the most "convenient counties"[a] were required on application from the commissioners to furnish the guard, which together with the body of laborers should not exceed fifty men. The work was completed, and compensation asked by the commissioners, December 1, 1781.[b]

Guards and Laborers to receive Grants of Land.

Work Completed 1781.

[a] John Bowman, appointed December 21, 1776, was the first "Colonel of the Militia" of Kentucky County. In 1778 he was made "County Lieutenant" of Kentucky. A copy of Colonel John Bowman's account against the Commonwealth of Virginia shows that his pay was twenty-two pounds ten shillings per month, and fifty dollars additional per month for subsistence. The former amount was in money, the latter in Virginia scrip. Collins, Vol. I, p. 10, gives a letter of instructions to Bowman from the Governor, Thomas Jefferson, dated March 6, 1779, in regard to the men from Kentucky County who were to be part of a militia commanded by Lieutenant-Colonel Knox and stationed in Powell's Valley, probably on this road.

[b] Brown's itinerary in 1781, from Hanover, Virginia, to Harrodsburg, Kentucky, 555 miles, gives the following distances along the line of the Boone-Logan trace from Cumberland Gap to Crab Orchard, which probably marked the limits of the section improved in Kentucky:

To	Yellow Creek	2 miles.	To	Raccoon Creek	8 miles.
	Cumberland	13 "		Hazel Patch	4 "
	Big Flat Lick	9 "		Rockcastle	6 "
	Little Richland Creek	10 "		Rockcastle River	7 "
	Big Richland Creek	1 "		Scagg's Creek	5 "
	Robinson Creek	10 "		Head of Dick's River	15 "
	Raccoon Spring	1 "		English Station	8 "
	Laurel River	2 "		Crab Orchard	3 "
	Little Laurel River	5 "			

The condition of the road at the time of his journey is thus described by Brown: "For about fifty miles, as you travel along the valley (Powell), Cumber-

December 25, 1790, £600 of Public Taxes appropriated for Repairs.

An act of December 25, 1790, provided for the appropriation of a sum "not exceeding" six hundred pounds of public taxes from Jefferson, Nelson, Lincoln, Mercer, and Madison counties, for the "opening and repairing" of the road leading through the "Wilderness" from the Russell County line to "English's station" in the district[a] of Kentucky, since it was reported that the road was "much out of repair," and the "intercourse" between the inhabitants of the district and the eastern part of the State was "greatly obstructed." John Logan, Harry Innes, Isaac Shelby, Samuel McDowell, and John Miller were appointed commissioners to contract with a "fit person" to make the improvements.[14]

land Mountain appears to be a very high ridge of white rocks, inaccessible in most places to either man or beast, and affords a wild, romantic prospect. The way through the gap is not very difficult, but from its situation travelers may be attacked in some places, crossing the mountain, by the enemy to a very great disadvantage. From thence until you pass Rockcastle River there is very little good road; this tract of country is very mountainous, and badly watered along the trace, especially for springs. There is some good land on the water-courses, and just on this side Cumberland River appears to be a good tract, and within a few years I expect to have a settlement on it. Some parts of the road is very miry in rainy weather. The fords of Cumberland and Rockcastle are both good unless the water be too high; after you cross Rockcastle there are a few high hills, and the rest of the way tolerable good; the land appears to be rather weak, chiefly timbered with Oak, etc." (Speed, The Wilderness Road.)

Filson's itinerary in 1784, from Philadelphia to the Falls of the Ohio, for the same section (Cumberland Mountain to Crab Orchard), is as follows:

To Cumberland River	13 miles.	To Laurel River	2 miles.
Flat Lick	9 "	Hazel Patch	15 "
Stinking Creek	2 "	Rockcastle	10 "
Richland	7 "	English Station	25 "
Down Richland	8 "	Colonel Edwards, Crab Orchard	3 "
Raccoon Spring	6 "		

[a] In March, 1783, Kentucky was formed into a district. (Collins, Vol. I, pp. 209, 259.)

Indian Attacks frequent at Cumberland Gap.

Throughout the period there were no forts within the mountain region along the Kentucky section of the road, and travelers were frequently assaulted by the Indians, especially in the vicinity of Cumberland Gap.[a] An ineffectual effort was made in 1782 to transfer the "Virginia Indian Agency" from Long Island, North Carolina, to the gap, since (William Christian writes Governor Harrison), it "is near half way betwixt our settlements on Holston and Kentucky, and a post there would be a resting place for our poor citizens going back and forward, and would be a great means of saving the lives of hundreds of them. For it seldom happens that Indians will kill people near where they trade; & it is thereabouts the most of the mischief on the road has been done. . . . I view the change I propose as of great importance to the frontier of Washington [County] to our people journeying to & from Kentucky, particularly the poor families moving out."[15]

Travelers joined together in Companies.

Travelers going in either direction joined together in companies, the members of which were expected to be

[a] George Rogers Clark and Gabriel Jones on their journey to Virginia during the summer of 1776 proceeded "through the southern Wilderness, as it has generally been called, lying between the settlements of Kentucky and those of Virginia." They found "the old stations near the Cumberland Gap and Martin's fort . . . both abandoned by the inhabitants, owing to fear of the Indians." (Butler, History of Kentucky, p. 38.)

Benjamin Logan, 1777, escaping from his besieged station to settlements on the Holston, two hundred miles distant, where the nearest ammunition was to be found, avoided the "trodden way" via Cumberland Gap, where he was most "likely to be waylaid by the Indians," and explored a passage over the Cumberland Mountain, "where no man had ever travelled before, through brush and cane over rocks and precipices." (Marshall, History of Kentucky, Vol. I, p. 52.)

well armed.[a] The departures of such companies, both from Virginia and Kentucky, were advertised in the local papers, which stated the place of rendezvous, time of departure, etc.[b] In Kentucky, Crab Orchard was usually the starting point. By act of November 27, 1790, the counties of Mercer, Lincoln, and Madison were authorized to give aid, in succession, to such companies; the commanding officers were directed to order out of their respective counties "alternately in every year, thirty effective men, in the months of October and November," to "rendezvous on the road leading through the wilderness at the east foot of Cumberland mountain on the fifteenth day of October and the tenth day of November," to "protect such company through the wilderness as may be in readiness at the place

November, 1790, Guard from various Counties ordered out annually in October and November.

[a] In Virginia one of the favorite meeting places was Abingdon and another Bean's Station on the Holston, at the intersection of a road from North Carolina. Forts on Clinch River were also meeting places. At times families would stay all winter at the forts, awaiting company. Western emigration over the road was heavy throughout the period. Occasionally parties were in sight of each other stretching from Cumberland Gap to Crab Orchard. The companies as a rule were very large, averaging from three to five hundred persons; one young man returning to Virginia met one of more than a thousand members. (Thompson, Pioneer Roads to Kentucky, p. 54; also Draper Collection, J.J. 3, and Maryland Journal, November 25, 1788.) Small groups of families who did not wait for the large companies were the ones chiefly molested. (Collins, Vol. II, p. 760.) The captives were often taken to Canada.

[b] A number of such notices in the Kentucky Gazette for 1788 are given by Hulbert, Historic Highways, Vol. VI, pp. 140–141. It was impossible for all members of a company to carry guns. There were usually from sixty to one hundred of these in a company of three hundred. On the return journey additional assistance seems to have been afforded by private enterprise, not always scrupulous as to methods. According to one of the pioneer travelers a company of seventy met at Crab Orchard, where guards were offered them at fifty cents a head. The offer was refused, and the guards were suspected of inciting an attack made on the party by the Indians. (Thompson, Pioneer Roads to Kentucky, pp. 84, 87; see also Draper Collection, Shane III, 46.)

and on the days above mentioned." The officers were to receive six shillings per day and the members of the guard four shillings. Certificates issued for services rendered were to be taken in liquidation of taxes due the Commonwealth from the counties.[8] The assistance was to be given the travelers because, the act recites, "intercourse between Virginia and the district of Kentucky is much interrupted by depredations and murders committed by hostile tribes of Indians who live contiguous to the road."[16]

The distance from Philadelphia to Kentucky by the Holston Valley route was between seven and eight hundred miles; from Baltimore, nearly seven hundred; from Alexandria, six hundred; and from Richmond, over five hundred miles.[17] The term "Wilderness Road" seems to have been applied to each stretch of this highway, used by the pioneers in advance of forts and settlements. By the close of this period it had come to mean the part of the road which

Term "Wilderness" applied to the road.

[8] Some of the certificates were not redeemed until after Kentucky became a State. December 18, 1804, provision was made by Kentucky for the reimbursement by the United States of the claims "for military services against the Indians, in and out of the limits of this State," since the year 1785 to the end of October, 1803. (Littell's Laws of Kentucky, Vol. III, pp. 203–204.)

An act of December 27, 1806, reads: "And whereas, by an act of the Virginia Assembly, the county lieutenants of Mercer, Lincoln, and Madison were authorized to send detachments of militia from their respective counties to guard such families from the Cumberland Gap through the wilderness as might be removing to Kentucky, and authorising the said county lieutenants to give certificates to the officers and men for the amount of their pay, which were receivable in any revenue tax in the then district of Kentucky. Be it therefore enacted, that the auditor of public accounts be . . . authorised to receive such certificates, issued as aforesaid to Edmund Turpin . . . " and others, "for the sum of three pounds eight shillings each, and issue other certificates in lieu thereof, in the same manner and for the same purposes as those heretofore issued for the services rendered in the campaigns of General Clark and Colonel Logan, in 1786." (*Ibid*, p. 407.)

extended from Powell's Valley to its termini at the various stations in the vicinity of Crab Orchard, and its Boonesborough branch, which for many years thereafter were so designated in the statute books of Kentucky. Imlay wrote in 1792:[18] "The roads and accommodations are tolerably good to the borders of the Wilderness; through which it is hardly possible for a carriage to pass. . . . This is the only route the people coming from the upper parts of Virginia and North Carolina can take at present to get into the country; the gap of Cumberland Mountain being the only place it can be passed without the greatest difficulty. . . . The Wilderness, which was formerly two hundred miles through without a single habitation, is reduced from the settlement of Powell's Valley to nearly one-half that distance, and it is to be expected that in a few years . . . the remainder of the distance will afford settlements for the accommodation of people travelling that route; when a good road may be made quite to Kentucky."[a]

[a] The same writer, referring to the Kentucky section, notes: "This road has been considerably improved, and a post now passes weekly through it from Philadelphia to Kentucky."

Mail for Central Kentucky was sent over the Wilderness Road as well as down the Ohio River as late as 1798. (Speed, The Wilderness Road, p. 68.) Much of the immigration into Central Tennessee passed, until 1785–1787, over this road and a branch, from near Crab Orchard along an old trail taken by Robertson in 1779 to the present site of Nashville. Over this route mail was taken to settlements on the Cumberland certainly as late as 1788 and probably later. (Ramsey, p. 575. For C. Robertson's route see Haywood, The Civil and Political History of Tennessee, new edition, p. 97.) By the year 1785 a road had been opened from Clinch River to Nashville, passing Crab Orchard in Tennessee, Flat Rock, etc. This road had been considerably improved by 1787 and provided with guards. (Ramsey, pp. 500–504.) Thereafter it was used a good deal by travelers journeying to Tennessee and to the southern counties of Kentucky. (Speed, Wilderness Road, pp. 63–65; see Map of the State of Kentucky with the Adjoining Ter-

The "New Road to Virginia"

Development of Big Sandy Road.

During the period there was developed one other road, which followed a cross-country path into the main Big Sandy trail.

In the early part of the period there was practically no pioneer travel over the more northern transmontane trails, which, although shorter, were rougher and more exposed to the northern Indians than was the southern route. The main New-Kanawha trail, with which they connected, and its branches, were regarded in Virginia simply as portage paths to the head of navigation on the Kanawha River, whence the Ohio might be gained. To facilitate this transportation there was considerable legislation, and some improvements were accomplished on the Virginia trail.[a] It was not until after 1783, when Indian

Improved after 1783, when Indian Attacks became Less Frequent.

ritories, by J. Russell, London, 1794, in State Library, Frankfort, Kentucky.) That this diversion of immigration was fortunate for the mountains may be seen from the following: "Tennessee has been so unfortunate as to receive a large amount of blood derived from the settlements made in the seventeenth century on the waters of Pamlico and Albemarle sounds. These people were imported from various parts of Europe by a land company. A portion of the population was excellent, but the mass of it was by far the worst of any brought to America under English auspices. From these settlements has come the greater part of the 'sand-hillers,' 'crackers,' 'dirt-eaters,' 'red necks,' and other opprobriously named varieties of 'poor whites' in the South. Kentucky has been so fortunate as to escape any large share of this population. Still, any one, whose eye is trained to recognize this streak of blood can occasionally identify families derived from it, especially along the southern border of the State. The western march of this unhappy people passed south of Kentucky. They may be traced across the country from the Carolina coast to Central Arkansas and Southern Missouri." (Shaler, History of Kentucky, note, p. 373.)

[a] In 1775 a wagon route was cut by the Reverend John Alderson from Catawba Creek, along the James River, to the Greenbrier, terminating at the present site of Alderson, West Virginia. In 1780 an act of Virginia authorized the justices

Courtesy of the C. & O. Railway.

THE KANAWHA GORGE.
(See Note a, page 57.)

attacks had become less frequent, that the improvements were extended to the falls of the Kanawha. From that time, however, serious attention was given to the betterment of the main trail and a Kentucky extension, as a "short cut" between the east and west.

1784, Wagon Road from Greenbrier County to Falls of Kanawha Authorized by Virginia.

In 1784 commissioners were appointed to examine the most convenient course for a road from the head of navigation on James River "to the nearest navigable part of the waters running into the Ohio." In October of the following year the commissioners reported favorably upon the project, and provision was made for constructing a road from the town of Lewisburg, in Greenbrier County, to the "lower falls" of the Kanawha, which was to be completed, "fit for the use of waggons, within two years," by the subscription of money, labor, and property. The opening of the road would "greatly coöperate with, and facilitate, the scheme for opening and extending the navigation of

of Greenbrier County to appoint three or more persons to mark a way for a wagon road from the Court House (Lewisburg) to the Warm Springs, or the wagon road at the mouth of Cow Pasture River, since there was no wagon road through the mountains to connect with the road to Richmond. Until the improvements extended to the falls of the Kanawha, however, this route was not practicable; as evidenced by an attempt of the McAfee Company, in 1776, to remove, with their goods and chattels, from Catawba River to their lands in Central Kentucky. The women and children were sent by way of Cumberland Gap; but, to avoid the long haul for baggage, the heavy goods—groceries, farm implements, etc.—were, in May, started over Alderson's road to Greenbrier River, about seventy miles distant. At the mouth of Gauley River canoes were built in which the goods were loaded and sent downstream. After a vain struggle for some fifteen miles against low water and rapids, the cargo was brought ashore and stored. The owners returned home for pack-horses, intending to continue their journey by the southern route. (Hale, Trans-Allegheny Pioneers, p. 267; Woods, Woods-McAfee Memorial, p. 180, 217; McAfee, Autobiography; Hening, Statutes at Large, Vol. X, p. 367.)

said river," and also enable the inhabitants of the country traversed to pay taxes by such subscriptions.[19]

1786, Commissioners Appointed to Extend Road from the Falls to Lexington.

By act of October, 1786, commissioners were appointed to receive subscriptions for opening a road from the falls of the Kanawha to Lexington, in Fayette County, which was to be finished on or before January 1, 1789. The act reads: "Whereas, the opening of a more direct and ready communication with the Kentucky district will be greatly facilitated and the distance to that country rendered shorter and safer by establishing a public road . . . and it is represented that such a road may be cut and maintained by private subscription."[20]

Road to be "Cut" and Maintained by Private Subscription.

The time for the collection of the subscriptions was extended to December 31, 1791, by an act passed in 1788, as the period previously allotted had been "found too short for the purpose thereof." By the act, also, public taxes were appropriated to the road from property through which it was to pass, since "the great public utility" which would arise from opening a "communication with the Kentucky district by means of the aforesaid road" would be considerably "retarded and prevented by the slow and uncertain means of receiving a sufficient fund by subscription," and "considerable taxes" had become due from "proprietors" of such land when it was impossible for them to derive any benefit therefrom because of the remote situation and the frequent inroads of hostile Indians. It was deemed "just that the amount of the said tax should

Public Taxes Appropriated to the Road.

be applied in such manner as to enhance the value of said lands."[21]

Commissioners again Appointed.

Commissioners were then appointed to open a road from the "town of Lexington" to the river known as the "Great Sandy" and to the most convenient part thereof below the "great forks." The commissioners, after giving a bond of one thousand pounds for faithful performance of duty, were required to set a time and place of meeting, and, having given two months previous notice in the Kentucky Gazette, to "then and there publicly let to the lowest bidder the opening of said road." The successful "undertaker" was enjoined to furnish bond that the road would be completely opened, fit for the passage of wagons, within three years from date.

A second body of commissioners was appointed to open a road from the Great Kanawha, starting from the house of William Clendinnen, one of the commissioners, in the county of Kanawha to the terminus of the road leading from Lexington to the Big Sandy. This road was to be finished at the same time as the other, and was also to be "let" to the lowest bidder.

Duties of the Undertakers.

The "undertakers" of both sections of the road were authorized to contract for labor, supplies of money, or other necessities for carrying on the work, with any person living within the counties of Fayette and Bourbon, for the Kentucky section, and with any inhabitant of Kanawha County for the section in Virginia. The persons so con-

tributing were to receive certificates from the undertakers, which, countersigned by a commissioner, were to be taken by the sheriff of the respective counties in payment of taxes due at the time, or thereafter, from the holders. The certificates, however, might not exceed three thousand pounds for Kentucky, or fifteen hundred pounds for Virginia.[22]

Opening of the Road interrupted by Separation of Kentucky.

The opening of the road was interrupted by the separation of Kentucky from Virginia. According to an act[23] of Virginia, December, 1794, Kentucky, after becoming a separate State, had refused to clear any part of the road. The funds collected in the former State, therefore, after payments had been made to individuals for "cutting and making" the road to date, were authorized to be expended upon a road from Elk River (the falls) to the mouth of the Kanawha.

Imlay's Map of 1793 shows the Road.

Jedediah Morse,[24] in 1792, refers to the road: "From the description given by hunters, it is much doubted whether it will be practicable to make a passable road from Kentucky to Winchester in Virginia, on the east side of the mountains, which on a straight line is not perhaps more than four hundred miles, and the way now travelled is six hundred." But Imlay's map, published in 1793,[25] gives "the New Road to Virginia," extending from Lexington by way of the junction of the two forks of the Big Sandy at Balclutta, now Louisa, to the falls of the Kanawha, where it connects with the main road, which extends

along the Kanawha and Greenbrier rivers to Winchester, situated on the road leading to Richmond, Alexandria, and other cities.[a] Indian attacks rendered this route unsafe until after the close of the period. In Kentucky there was but one station on the road within the mountain region. This was Vancouver's Fort, at the forks of the Big Sandy, which from 1789 to 1790 was occupied by settlers.[b]

[a] Barker's Map of Kentucky, published in 1795 (in State Library), gives a road extending past "Bourbon Furnace," on Slate Creek, to "Mud Lick" (Olympian Springs), crossing the Licking at the mouth of "Triplet's Creek" and passing up the latter stream and across the Little Sandy, probably at the salt springs south of Grayson, to "Balclutha." Imlay's Map of Kentucky, 1793, gives the "New and short route to Virginia" as formed by two branches at "Morgan's Station" on the headwaters of Slate Creek; one leading from "Bourbon" (Paris) via the "Iron Works" on Slate Creek, the other from Lexington via "Strode's Station" (near Winchester). The main road is the same as Barker's as far as Mud Lick, but from that point has a more southern course, crossing the Licking at some distance above the mouth of Triplett's Creek. An act of Kentucky, December 13, 1799, probably refers to Imlay's route in mention of a "fifty-mile tree" on a "State road" leading from Mt. Sterling and crossing Blackwater Creek. The same road is also referred to in an act of January 10, 1815. (Littell's Laws, Vol. II, p. 285, Vol. V, p. 156; for Imlay's map see Topographical Description, etc., opposite page 400.)

[b] See p. 74, Note b. There were, however, two stations on Slate Creek along the margin of the region. Morgan's Station, noted above, was about seven miles east of Mt. Sterling. According to Collins, Vol. I, p. 23, on April 1, 1793, this was "captured" by the Indians and nineteen persons, women and children, were taken prisoners. "Slate Blockhouse" was built, in 1785 or 1786, near where Jacob Myers, about 1790, erected the "Slate iron furnace." (Collins, Vol. I, p. 47.) Travel on the road was inconsiderable throughout the period. There are only occasional records of its use by pioneers. The following notice occurs in the Kentucky Gazette, Lexington, October 4, 1788 (MSS. copy, Draper Collection, Shane V, XV): "A company will start on the 10th of October (1788), intending to travel the new road to Virginia." The road is described by Spencer Records, a pioneer who went that way in 1793, returning from Kentucky to the east (Spencer Records' Narrative, Draper Collection): "I again set off for Pennsylvania. We took a trace that had been lately marked out, passing the Mud Lick, at that time a very noted place; crossed Licking and proceeded over a very rough and mountainous part of the country, crossing the Great Kanawha at Morris Station, a little below the mouth of the Gauley River. . . . We then took an old cut-out road that led to the Greenbriar Courthouse, Lewisburg. At that place the company separated." (Thompson, Pioneer Roads to Kentucky, p. 35.)

Commissioners Men of Ability.

The various commissioners, appointed to improve the highways and thus render communication between Virginia and the settlements in Kentucky easier, were men of ability and high standing, many of whom distinguished themselves later as statesmen, soldiers, or business men. But the mountain barrier presented too many obstacles to good roads; the commissioners were unable closely to unite the two districts. This fact was one of the determining causes of the political separation of Kentucky from Virginia, and its admission into the Federal Union as a State in June, 1792.

Lack of good Connecting Roads a Determining Factor in the Separation of Kentucky.

This shown by Report of the Danville Convention.

The following extract[26] from the report of the Committee of the Whole, at the convention held at Danville August 8, 1785, was repeated in substance in the State[27] and Federal acts relating to Kentucky's statehood:

"Your Committee . . . are of the opinion that the situation of this district, upwards of five hundred miles from the seat of the present government, with the intervention of a mountainous desart of two hundred miles, passable only at particular seasons and never without danger from hostile Nations of Savages, precludes any idea of a connection on republican principles and originates many grievances."

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18. *Ibid.*
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CHAPTER IV

1792-1850—Kentucky State Roads

Transmontane Routes of Importance for Interstate Commerce.

During the period from 1792 to 1850 mountain routes continued to be of importance to Kentucky, since they connected the highways in the Bluegrass with the eastern roads extending to the coast. In contrast to the preceding period they were now but little used for travel, because of the opening of more favorable routes, notably the Ohio River, on which the transportation facilities were annually increased; the road across the Tennessee Plateau from Knoxville to Nashville; and the national road to Wheeling, opened in 1818. But they became significant at this time as routes of interstate commerce.

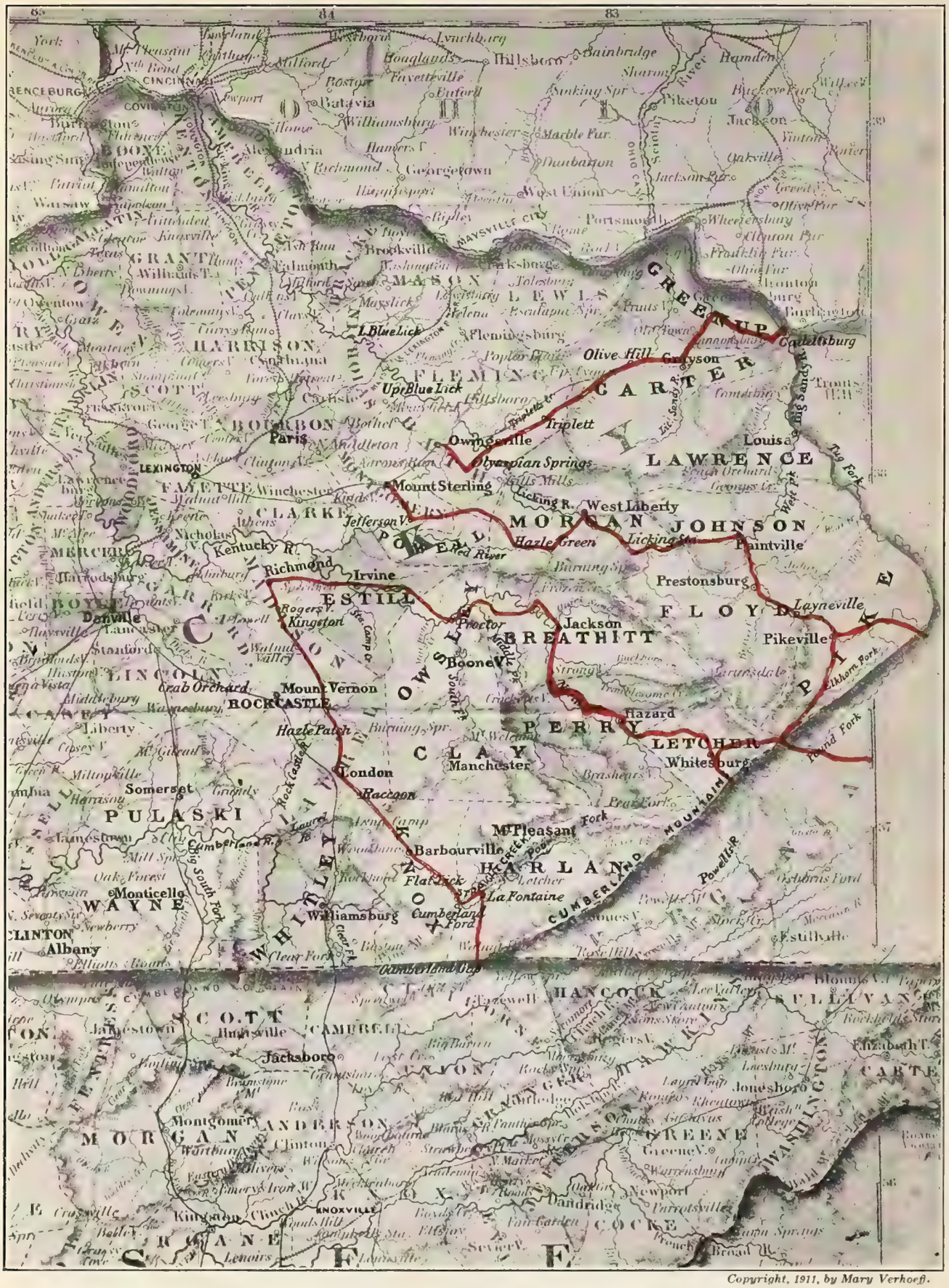
Chief Traffic was in Livestock.

The most important transmontane traffic was in livestock, for the breeding of which Central Kentucky became famous. It was so important, indeed, that even in times of financial stress banks made special provisions by which Kentucky drovers were enabled to finance their operations,[1] and the farmers living along the mountain roads exhausted their lands in efforts to furnish a supply of food and forage sufficient for the journey.[a]

Market in Philadelphia and Baltimore.

A market was found on the headwaters of the James and Potomac rivers, where the stock brought by the Kentucky drovers was fattened before it was sent farther east.

[a] See note, page 146.



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TRANSMONTANE ROADS IN 1856, AS GIVEN ON COLTON'S MAP OF KENTUCKY AND TENNESSEE.

Railroads.

Projected Railroads.

Roads.

Transmontane Roads.

According to Michaux,[2] writing in 1802: "The number of horned cattle is very considerable in Kentucky; those who deal in them, purchase them lean, and drive them in droves of from two to three hundred to Virginia, along the River Potomack, where they sell them to graziers, who fatten them in order to supply the markets of Baltimore and Philadelphia. The price of a good milch cow at Kentucky is from ten to twelve dollars."

In 1825 Jared Sparks[3] states: "Large droves of live-stock, especially hogs, are now driven every year from the banks of the Ohio in Kentucky to Baltimore, in preference to being packed on the spot and sent down the river by a more speedy conveyance to the New Orleans market."

Southeastern States the Principal Market.

There was also a market to the southeast, which after the close of the Creek War, in 1814, became the more important. Here the greatest demand was for horses and mules, which were driven, as a rule, through Cumberland Gap and by way of Knoxville into Georgia, or by way of the French Broad River and through Saluda Gap into the Carolinas.[a]

Michaux[4] writes further: "The Southern States, and in particular South Carolina, are the principal places destined for the sale of Kentucky horses. They are taken there in droves of fifteen, twenty, and thirty at a time, in the early part of winter, an epoch when the most busi-

[a] About 1836 drovers of horses and hogs from the West were taking annually from South Carolina two million dollars in cash. (Kentucky House Journal, 1836–1837, Appendix.) The distance from Charleston, S. C., to Lexington, Ky., via Columbia, Reedy River, and Cumberland Gap was 553 miles, according to Melish. (The Traveller's Directory in the U. S., 1822.)

ness is transacted at Carolina, and when the drivers are in no fear of the yellow fever, of which the inhabitants of the interior have the greatest apprehension. They usually take eighteen or twenty days to go from Lexington to Charleston. This distance, which is about seven hundred miles, makes a difference of twenty-five or thirty per cent in the price of horses. A fine saddle horse in Kentucky costs about a hundred and thirty to a hundred and forty dollars."

Decline in Livestock Traffic.

The trade in livestock was maintained in large proportions until near the close of the period.[a] The decline was due partly to the improved methods of transportation on the Ohio, which not only absorbed much of the traffic but led to the establishment of large packing-houses in the principal river cities and a home market for livestock. Other factors were the rapid increase of railroad mileage in the Ohio-Mississippi basin about 1853, and the consequent removal of the grain and livestock belts from the Ohio Valley, once the granary of the West, to the Northwest, with Chicago as a center.[5]

Small Quantities of Merchandise sent to East Tennessee.

For some years the mountain roads were of considerable importance, also, as portage routes connecting the Ohio River with the South. Merchandise, of light weight and high value, was brought from Philadelphia to Pittsburgh, and from Baltimore to Wheeling, by wagon, and shipped from these points down the Ohio to Maysville, Covington,

[a] Although as late as 1864 a business directory for Kentucky notes that "large numbers of horses and mules are annually driven east to the Atlantic States for sale."

and Louisville, whence it was distributed into the interior of the State by means of large canvas-covered vehicles known as road-wagons. In like manner agricultural products were sent back to the Ohio and shipped down to New Orleans, whence they finally reached the Eastern States. This Ohio sphere of influence was extended southward as roads were improved, and merchandise was sent over the mountains to Eastern Tennessee, where roads were built to connect with those from Kentucky. Over them the importations from the Ohio were taken in wagons as far as Knoxville, which was the distributing point for the back country of the two Carolinas and Alabama.[a] Hemp from the Blue-

[a] See note, pp. 126, 127, also p. 158.

According to Melish, in the Description of Roads of the United States, 1814, the distance from Frankfort to Cumberland Gap via Danville, Stanford, and Crab Orchard was one hundred and fifty-four miles. The Traveller's Directory through the United States for 1822 (Melish) gives the distance from Cumberland Gap to Knoxville as sixty miles. Other routes were improved, some of them tributaries of the Wilderness Road, which intersected the road across the Tennessee Plateau passing between Nashville and Knoxville. Laws were enacted in regard to a road from Danville to South-West Point in Tennessee, at the junction of the Holston and Clinch rivers, which led into the Appalachian Route at Tellico, as early as December 18, 1804. (Littell, Vol. III, pp. 204, 275; see also Ramsey's Map.) Melish, in 1814, notes a road from Lexington which led through Stanford and Somerset and across the Cumberland River to Chetwood on the Kentucky-Tennessee line (route of the Queen & Crescent Railroad). In Tennessee this road passed through Jacksboro. The total distance to Knoxville, as given by the Traveller's Directory, 1822, was one hundred and sixty-seven miles. The road from Williamsburg (route of the Knoxville Division of the Louisville & Nashville Railroad) connected with the Tennessee road. (See Note a, p. 132.)

On March 2, 1834, "The first lot of goods from Philadelphia, by way of the Pennsylvania canals and portage railroad over the Alleghany mountains, reaches Pittsburgh, in thirteen days from Philadelphia; and in three days more reaches Maysville." (Collins, Vol. I, p. 39.) Merchandise sent in this manner from Philadelphia to Knoxville could not reach its destination in less than thirty days, while in the winter, when the canals were frozen over, three months often elapsed before delivery. (Proceedings of the Knoxville Convention in Relation to the Proposed Louisville & Charleston Railroad, Knoxville, July 5, 1836.)

grass formed an important item in this commerce—demanded, as the cultivation of cotton increased, as bagging for covering, and rope for tying, cotton bales.

State Aid Given because of Interstate Commerce.

The principal mountain routes and their tributaries were improved at various times by State aid. This was permanently withdrawn, however, when the interstate commerce, for the encouragement of which it was given, declined. The Wilderness Road, cleared in the preceding period, was further improved in this, and three other thoroughfares were established—a Big Sandy trail, approximately as given by Barker[a]; the Red River-Pound Gap trail, approximately that followed by Gist; and the Kentucky River trail, leading to Pound Gap by way of the North Fork.

Four Routes and their Tributaries converted into Wagon Roads.

Converted into wagon roads, these four routes, along which the principal settlements were made and by means of which commerce was carried on with the outside, became the main highways, to which all local roads and forest trails were tributary.

Improvement under Commissioners insignificant.

Before the creation of the Board of Internal Improvement the work accomplished on the roads by means of State aid consisted merely in widening the passageway by clearance of obstructions; in corduroying marshy places with timber; and in excavating banks at fords, although occasionally rough wooden bridges were built. In "viewing" the road, for the most part, the old trails were slavishly followed, the lines leading "along high ground or ridges,

[a] See Note a, page 95.

avoiding miry places and impassable hills, shaped to pass some ever-flowing spring, and so as to lead to fording places of the stream, descending and ascending from these by the easiest slope." The mileage was enormous on such zig-zag routes, and the grades up and down hill were always steep and difficult.

Of a Higher Order under Board of Internal Improvement.

Under the board, although the best of the improved roads were merely dirt turnpikes made by throwing the earth from the sides to the center in a rounded form, the work accomplished was of a much higher order. There were careful surveys and measurements for the purpose of selecting the best lines and grades; the main thoroughfares were regraded, ditched, and drained; and substantial bridges of stone were constructed at a number of points.

Total Expenditures.

The expenditures of the board were considerable, aggregating on the main lines, between 1835 and 1850, $206,186.98.[a]

The Wilderness Road

Cumberland Gap Route first to be Improved.

The route through Cumberland Gap was the first to receive attention from the State.[b] Previous to any legislation, however, "a scheme was projected for the clearing and improvement of the Wilderness Road under the direc-

[a] See note, p. 170.

[b] The Virginia extension was also improved. November 17, 1792, commissioners were appointed by that State to "open a wagon road from the blockhouse in the western extremity of Washington County to the top of Cumberland Mountain in the county of Russell (now Lee), where the road from the State of Kentucky terminates," to facilitate intercourse "from the extreme southwestern parts of the State with the eastern seaports." (Hening, Statutes at Large, Vol. VIII, p. 544.)

tion of Colonel John Logan and James Knox. It was a private enterprise altogether."

1792, First Project Private.

Speed[6] gives the details of the project, quoting from an account book of Henry Innis: "Colonel John Logan and Colonel James Knox, having consented to act as commissioners to direct and supervise the making and opening a road from the Crab Orchard to Powell's Valley, provided funds to defray the necessary expenses shall be procured, we, the subscribers, do therefore severally engage to pay the sum annexed to our names to the Hon. Harry Innis and Colonel Levi Todd, or to their order, in trust, to be by them applied to the payment of the reasonable expenses which the said commissioners may incur in carrying the above design into effect, also to the payment of such compensation to the said commissioners for their services as the said Innis and Todd may deem adequate." One hundred and twenty-two subscribers are enumerated, with contributions ranging from three pounds to four pence, and in one case bacon. "The money subscribed was disbursed by Harry Innis. Men were employed as 'road cutters,' as 'surveyors,' to 'carry provisions,' to 'grind corn,' and 'collect bacon.' The pay was two shillings per day, and the work extended over twenty-two days in the summer of 1792."

First Legislation Concerned Guards.

The first legislation concerned road guards only.[a]

[a] Between 1792 and 1794 the Indians committed many outrages along the southern border of the State. (See note, p. 78; also Collins, Vol. II, p. 761, and Ramsey, pp. 608–620.) In 1793 a number of families moving to Kentucky were

Act of November, 1795, Authorized the First Improvements.

The improvement of the road by the State was first provided for by an act passed in November, 1795:[7] "Whereas, it is essential to the true interest of this Commonwealth that a good waggon road should be made to Virginia: Be

attacked near Hazel Patch, on the Wilderness Road, and the women and children were taken captive. (Collins, Vol. II, p. 477.) Governor Shelby, November 6, 1793, in an address to the Legislature, stated that he had been authorized by the President of the United States to establish two blockhouses on the Wilderness Road leading to the Holston Settlements, provided they could be garrisoned by militia to be continued in service not longer than six months and who would be entitled to the same pay and rations as the troops of the United States. The governor had considered the rendering of this road safe so important to the State as to make the establishment of these posts a "serviceable object," but had found it very difficult to establish and relieve the garrisons with militia under the existing militia law, and also impracticable to procure men to engage in such service voluntarily for the pay and rations allowed the United States troops. He therefore had appointed two officers to enlist the number of men necessary for such service, for the term of six months, giving as his opinion that volunteers would be allowed by the State the additional pay that they would receive if called out as State militia into the service of the United States. He recommended the payment of same because the importance of the service rendered it a saving as compared to calling out the militia, and owing to the impracticability of keeping up the posts with militia. An act of December 19, 1793, granted the additional pay to those men whom the governor had deemed it expedient to enlist with expectation of the allowance, and also authorized the governor to enlist under same terms for the future garrisoning of the said blockhouses any number of men, not exceeding thirty, to serve for not more than one year from the end of the Legislature then in session. (Kentucky House Journal, 1793, pp. 7–10, 15, 16, 20 (Manuscript in State Library); Enrolled Bills, File Room, State-house.)

A communication to Governor Shelby from the United States War Department, dated May 17, 1794, certified that $985.20 had been placed in the hands of the Paymaster to the Kentucky Volunteers of 1793, for the pay of sundry troops stationed under the governor's authority in the Wilderness. (Shelby Correspondence, File Room, State-house.) December 7, 1793, the act was repealed which had allowed militia called into service by Congress to receive pay and rations from the State in addition to the recompense received from the United States, so as to render the latter equal to that received by militia called out by the Commonwealth. (Enrolled Bills.) As late as 1795, however, "additional pay" was allowed a "certain guard" on the Wilderness Road. (Littell's Laws, Vol. I, p. 254.) Barker's Map of Kentucky, June, 1795, gives two "Stations" on the road–"Moddrels," between the Rockcastle and Laurel rivers, and "Middletons," between the crossings of Turkey and Richland creeks.

November 16, 1799, there were two companies from Lincoln County on the road. (Garrard Correspondence, Huston to Toumlin, File Room, State-house.)

Commissioners Appointed.

it enacted by the General Assembly, that three men of integrity and responsibility be appointed by the governor, as commissioners, and vested with full powers to open a waggon road, to commence in the neighborhood of the Crab Orchard, and to terminate on the top of Cumberland Mountain, in the gap through which the present road passes; the said commissioners shall have absolute discretion as to the direction of the same, with power to let out the clearing thereof . . . to such persons as they may think fit, or to employ a sufficient number of hands, guides, surveyors, chain-men, markers, etc., for the execution thereof, in the cheapest and most effectual manner." The

Road to Afford Passage for Wagons of One Ton Burden.

road was to afford "safe and easy passage of waggons and carriages," to be in every part perfectly commodious and passable for wagons carrying one ton weight, and except where digging or bridging was necessary at least thirty feet wide. In case of contract work, advertisements were to be placed for six weeks in the Kentucky Gazette and the work let to the lowest bidder, who was to give bond to the State treasury, the commissioners being the "sole judge" of the fulfillment of the contract; "and the General Assembly being desirous that no impediment may stand in the way of the most speedy and beneficial execution of the same, and willing that the largest sum that the present state of the public funds will admit of should be consigned to that purpose: Be it further enacted, That the sum of

Two Thousand Pounds Appropriated from State Treasury.

two thousand pounds is hereby appropriated to the above

purpose." When completed the road was to be considered as "established," and might not be "changed, altered, or obstructed" by private individuals, or by the court of any county, without the consent of the Legislature.

Road Established.

The road was opened during the summer of 1796.[8]

Opened in 1796 between Crab Orchard and Cumberland Gap.

An act passed March 1, 1797,[9] appropriated five hundred pounds for the repair of the road "opened through the Wilderness to Cumberland Gap," and provided for commissioners to undertake the work: J. Crockett was appointed a special commissioner to contract for a turnpike[a] (tollgate), the cost of which was not to exceed sixty dollars, with directions to locate the same at some "convenient place," and purchase for it land, not exceeding two acres, beyond the intersection of the Wilderness Road with one from Milford (its Boonesborough branch). The turnpike was to be "let out" to the highest bidder or to a private contractor, for one year, by the commissioners of both road and turnpike, and thereafter no money from

1797, Five Hundred Pounds for Repairs.

Tollgate Authorized.

[a] This tollgate, situated near Cumberland Ford, the first erected in Kentucky, was the only one on the main Wilderness Road until 1830. (See p. 121.) On December 21, 1805, the Virginia Legislature authorized the Lee County Court to erect "a turnpike" on the road leading from "Mokerson" Gap through Lee County to Cumberland Gap. It was built near the top of Cumberland Mountain, within a few feet of the Kentucky State line. Its situation caused much dissatisfaction, especially in Kentucky, because while the gate had been erected only for the purpose of keeping the Virginia road in repair, it subjected "to the payment of toll an immense number of travellers using other roads." The governor of Kentucky "remonstrated" with the governor of Virginia, and the suspension of the gate was ordered. In 1806, however, it was still in operation, with "a body of armed men to guard and compel the payment of toll," and a further remonstrance was sent, this time from the Legislature of Kentucky to that of Virginia. (Statutes of Virginia and Kentucky relative to the Town of Louisville, 1780–1823, p. 141.)

the treasury was to be expended upon the road except the toll receipts.

Toll Rates fixed by Law.

The toll rates, with a fine of ten dollars for attempted evasion, were fixed as follows:

All persons except post-riders, express, women, and children under ten years.	9 pence (12½ cents).
Horse, mule, or mare.	9 pence.
Carriage with two wheels	3 shillings.
Carriage with four wheels	6 shillings ($1.00).
Head of neat cattle going eastward . .	3 pence (4½ cents).

December, 1794, Provision Made for Opening Boonesborough Branch.

In the meantime, by an act[10] approved December 12, 1794, five commissioners had been appointed to raise subscriptions in "money, labor, or property" for clearing a road (the Boonesborough Branch) from Madison Court House, at Milford,[a] four miles from Richmond, to the Hazel Patch, situated on the road leading from Crab Orchard to Powell's Valley. The commissioners were to appoint "viewers" to locate the road, and by "contract or otherwise" have it "cut out and cleared as soon as practicable." If the road were not made within a "reasonable time" the Madison County Court might order out "tithables" according to the general law of the State, and these were to be excused only upon the payment of three shillings per day. The subscriptions, which were to be "opened"

Boonesborough was "established a town for the reception of traders" by a Virginia act, October, 1779. For a number of years it was important as a road center. Russell's map of 1794 shows a number of roads converging there. It was important also as a shipping port on the Kentucky. By act of 1798, February 3d, the county seat of Madison was removed from Milford to Richmond, which became the chief point on the road, and Boonesborough, after 1810 (when it contained sixty-eight inhabitants), became an obscure hamlet. (Littell's Laws, Vol. II, p. 165; Collins, Vol. II, p. 493.)

at various times under the direction of the county court, when not complied with were to be recovered, those not exceeding five pounds by warrant from a single justice, and those over this amount in the county court. Persons through whose lands the road extended were allowed rights of condemnation in the succeeding seven years.

Law Not Carried Into Effect. Further Provision Made.

The law was not carried into effect. Accordingly the commissioners appointed to superintend the work on the main road by the act of 1795[11] were directed by the same act to open this branch as a wagon road under the same regulations.[a]

Road still "Neglected." Act of March, 1797.

In 1797,[12] since the opening of the branch road had still been "neglected," an act was approved March 1st

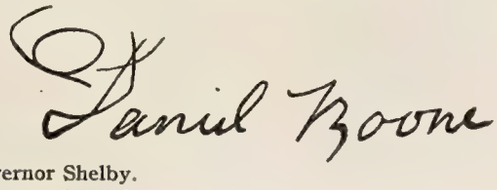
[a] Collins, Vol. II, p. 242, gives the following letter from Boone, then aged sixty-five, signifying his intention of "undertaking" the work:

feburey the 11th 1796

Sir

after my Best Respts to your Excelancy and famyly I wish to inform you that I have sum intention of undertaking this New Rode that is to be Cut through the Wilderness and I think My Self intiteled to the ofer of the Bisness as I first Marked out that Rode in March 1775 and Never Re'd anything for my trubel and Sepose I am No Statesman I am a Woodsman and think My Self as Capable of Marking and Cutting that Rode as any other man Sir if you think with Me I would thank you to wright mee a Line By the post the first oportuneaty and he Will Lodge it at Mr. John Miler son hinkston fork as I wish to know Where and When it is to be Laat So that I may atend at the time

I am Deer Sir your very omble sarvent



To his Excelancy governor Shelby.

empowering the governor to appoint "two fit persons," one of whom was to live "on the north side of the Kentucky River," to undertake the task. The commissioners were invested with the same authority as was given by the act of 1795, and in addition to the residue of the sum appropriated by that act there was added five hundred pounds.

Other Legislation. "Wilderness Road" included Main Road and Branch.

During the next three-quarters of a century laws were frequently enacted concerning the "Wilderness Road," which term referred as a rule to both the main road from Crab Orchard to Cumberland Gap and its Madison County branch. The legislation consisted chiefly in provisions for labor and the management of the tollgates necessary to keep the roads, as thus established, in repair.

First Tollgate Keeper, 1798.

The first tollgate keeper, Robert Craig, acted in the place of John Thurman, appointed by an act of February 10, 1798, for seven years, on good behavior and under penalty of three thousand pounds for non-performance of duty, but who had refused to serve.[a] It was proposed by the act to keep the "Wilderness Road" in good repair from the profits of the turnpike, and the keeper was accordingly

[a] The governor, November 7, 1798, in an address to the Legislature, explained that the refusal of John Thurman to act had rendered it necessary that the turnpike remain unoccupied until the meeting of the Legislature or that he should "farm" the gate on the terms of the law for one year only. He had adopted the latter course, since it was of "considerable consequence" that the road should be kept in repair, but advised a modification of the law so as to place the State on an "equality at least with any future undertaker." (Kentucky House Journal, 1798, p. 6.)

November 28th, Robert Craig set forth to the same Assembly that the period fixed for the repair of the road was too short, and prayed for further time; an act of December 11, 1798, granted him an extension of six months. (*Ibid*, p. 44, and "Enrolled Bills.")

directed to "amend the road from Cumberland Gap to the Grassy Lick (Crab Orchard road) and the road leading to Madison from the forks" where it intersected the "Crab Orchard road to Lee's Lick,[a] and where . . . necessary to make bridges and causeways, to keep the said road in good order for travellers and wheel carriages." As a compensation therefor he should receive "all the profits of the said turnpike." The rate of toll was reduced one-half on wheeled vehicles. Two commissioners were to be appointed by the governor to oversee and direct the repairs. No change was to be made in the route, except for "getting better ground, or avoiding hills or other bad places."[13]

Road to be Kept in Repair by Profits from Tollgate.

Commissioners to Direct the Repairs.

The act[14] of December 9, 1799, empowered the governor to lease for any term of years, not exceeding five, and upon the best terms possible, the "keeping of the turnpike on the Wilderness Road." A five hundred dollar bond was required of the keeper to insure the Commonwealth against further expense in keeping the road in repair. Wheeled carriages entering the country "with movers," or settlers, were to be charged the same rate as other wheeled carriages. One commissioner was to be appointed, with the powers of the former two, and should receive as recompense two dollars per day.

December, 1799, Governor to Let Out Road for Five Years.

One Commissioner Appointed with Powers of Former Two.

[a] The town of Crab Orchard was situated on the Wilderness Road, about ninety-one miles from Cumberland Gap and thirteen miles from the present site of Mt. Vernon. Grassy Lick (designated the "Glades" on Barker's Map, 1795) was between these points, about three miles from Crab Orchard. (See p. 113, and Collins, Vol. II, p. 690.) Lee's Lick was probably near Joe's Lick (see p. 113), about ten to fifteen miles southeast of Richmond, near the present site of Berea.

1802, Appointment of Commissioner.

The act[15] of December 20, 1802,[a] provided that the governor should "appoint a commissioner of the Wilderness roads, from Grassy Lick to Cumberland Gap, and of the one intersecting therewith, from its intersection to Lee's Lick." This commissioner, who was to remain in office until "directed by law," was to receive two dollars per day "for the time . . . engaged in discharging the duties enjoined him by law." The duties included the supervision of all repairs and of the turnpike keeper's accounts.

Salary of Keeper.

The keeper, appointed by the governor, was to be given two hundred dollars per year.

Toll Rates Reduced.

The toll rates were reduced about one-half.

Each wheel per carriage	12½ cents.
Each person above ten years	6 cents, 2½ mills.
Each horse or beast	6 cents, 2½ mills.
Each head of neat cattle	3 cents.
Each hog or sheep	1 cent.

Exemptions.

There were exempted, besides the post-riders and express, all persons moving to the Commonwealth with families, those residing within ten miles of the turnpike, and those "unable to pay."

[a] October 31, 1802, one hundred dollars was paid into the State treasury by the gate-keeper. (Marshall, Vol. II, p. 359.) The condition of the road at this time, however, was the cause of much dissatisfaction. George Neal, who had crossed Cumberland Gap September 25, 1802, wrote the governor in November that the road was "much neglected" and "must cause poor travellers to reflect, and that justly, on our State." (Garrard Correspondence, File Room, Statehouse.) The commissioner of the same year reported the road to be in "bad shape," and suggested that a method be devised of "letting" the turnpike that would be of "more general satisfaction and public utility." (*Ibid*, received October.) In November the same commissioner reported that repairs had been made, but that many more were necessary. The Madison road had been cleared of such obstructions as old trees; few carriages passed over this road, which was "dry" but very "hilly." (*Ibid.*)

1803, Residents within three miles liable to Road Duty.

Exemption Repealed.

The act[16] of December 22, 1803, required all the residents within three miles of these roads, as thus defined, to work upon them four days a year, and repealed the exemption from toll of families moving to the State.

1804, Road divided into Three Sections for Repairs.

The act[17] of December 19, 1804, divided up the Wilderness Road, for purposes of supervision and repair, into three sections.

The section "that leads from Joe's Lick, in Madison County, to the intersection of the road leading from the Crab Orchard to the Cumberland Gap," was to be cleared and kept in good repair under the direction of the Madison County Court, according to the general law. The route might be changed for a "nearer or better way." A commissioner appointed by the court, with a maximum salary of two dollars per day, was to receive from the turnpike keeper "a just proportion of the tolls," to be ascertained by the proportion that 34, the mileage of the Madison road, bears to 88, the mileage of the other part of the State road. This money was to be expended "under the direction of the Madison County Court, in repairing and improving said road, at such places and in such manner" as could not "be conveniently done by the citizens living near the said road."

County Courts to Direct Improvements.

The section between the "Grassy Lick and the forty-mile tree" was placed under the commissioner then in charge of the entire road. He was to be "styled the commissioner of the Crab Orchard road"; but from the com-

mencement of this act ceased to be commissioner over the "residue of said road." He was to be paid by the turnpike keeper, after the Madison County commissioner had been given his proportion, two-thirds of the gate receipts, the money to be used for the maintenance of the road.

The part of the road lying between the forty-mile tree and Cumberland Gap was placed under the care of the Knox County Court, which was to be governed by the same regulations as was the Madison County Court. The commissioner appointed by the court was to be paid three-fifths of the total gate receipts after Madison County had received its share.

December, 1805, Tollgate Keeper to be Appointed by Governor at a Salary of $200 a year.

By the act[18] of December 21, 1805, the governor was again authorized to appoint annually a keeper of the turnpike, with a salary of two hundred dollars a year. The entire road was relegated to the various counties, "to be cleared and kept in good repair for the passage of carriages of all kinds." A redivision of the road was necessary. The part between Cumberland Gap and the sixty-one mile tree was apportioned to Knox County; between the sixty-one mile tree and Grassy Lick, to Lincoln County; from Joe's Lick to the intersection of the Cumberland Gap-Grassy Lick road, to Madison County. Knox County was to receive one-half of the toll and the remainder was to be divided between Lincoln and Madison counties in the proportion of 27 to 24, the respective road mileage.

Redivision of the Road for Repairs.

By the act[19] of February 23, 1808, all former acts relative to the Wilderness Road and the turnpike, which vested any power whatsoever in the county courts, were repealed. The authority was now to be given to four directors, appointed annually by the governor, one residing in each of the four counties—Garrard, Madison, Lincoln, and Knox—traversed by the road. The directors might portion off the road into as many precincts as they thought proper and appoint to each precinct a commissioner, whom they might remove for misconduct or neglect of duty, and to whom they should pay one dollar and fifty cents for every day he should be actually engaged in performing the service required of him, namely, the superintendence of the hands working on the road. The directors could "amend" the road "by removing it upon other ground," provided that the part so removed did not exceed the distance of three miles. The directors were to collect the gate receipts from the keeper at specified times and use so much as was necessary to keep the road in repair, reporting annually to the governor in February the amounts so expended, and paying into the public treasury any balance. Three special commissioners were appointed to build a bridge across Rockcastle River, on the Madison County road, who were to draw "on the turnpike keeper for the moneys remaining in his hands at the last settlement, together with one-fourth part of the profit of said turnpike for one year," at such times as they deemed proper.

February, 1808, Supervision of Repairs transferred from County Courts to four "Directors."

Route might be Changed within Certain Limits.

Commissioners Appointed to Build Bridge over Rockcastle River.

February, 1809, Further Time allowed for Completion of Bridge.

The act[20] of February 9, 1809, provided that "the further time of eight months from and after the first day of March next, be . . . allowed the undertaker of the bridge to be built over Rockcastle River on the Madison road, to finish said bridge." And "one-fourth of all the money received by the turnpike keeper for toll, after deducting his salary," was appropriated for the purpose alone of keeping in repair the said Madison road and the finishing and keeping in repair the said bridge, provided the sum requisite for the latter purpose did not exceed one-third of the appropriation. Any balance of the remaining two-thirds of the tolls was also to be used on the bridge if the above sum should prove insufficient. Instead of four directors there were now to be but three, appointed by the governor from Madison, Lincoln, and Knox counties. The tolls were increased:

Part of Tolls appropriated to Bridge.

Three Directors instead of Four.

Toll Rates Increased.

Wagons, each wheel	$0.12½
Four-wheel riding carriage and team	1.50
Two-wheel riding carriage and team	.75

Citizens of Knox County Exempt.

The act[21] of January 15, 1810, exempted the citizens of Knox County, and their property, from the payment of tolls. It prohibited the county courts from allowing roads to be opened whereby the turnpike might be avoided.[a]

January, 1811, Three "Managers" Appointed.

By the act[22] of January 31, 1811, three managers were appointed, one each from Knox, Rockcastle, and Madison counties, at one dollar and twenty-five cents per day and with the same powers as the former directors, one of whom

[a] See note, p. 49.

had resigned and another had gone away from the State. The new management was directed to build a bridge across the "Big Laurel River" on the Wilderness Road, or else to purchase the one already standing, which belonged to one Isham Farris, and to pay for the same from the tolls collected. The salary of the gate-keeper was increased fifty dollars. This act concerning the managers was repealed[23] February 2, 1813, and the governor was directed to appoint annually three commissioners to take charge of the road. They were authorized to engage laborers by the year, or they might "purchase, with any funds in their hands arising from said turnpike, any number of young able-bodied healthy negro men, not exceeding ten, to be employed in working on the said road when necessary, and to be hired out for the benefit of said institution when not necessarily employed on the said road"; and in making such purchases they should take "good and sufficient conveyances of the title to such slaves, to the governor." The commissioners were to employ a fit person to superintend the work on the road and manage the hands. A maximum fine of ten dollars for each offense was imposed for injury to bridge or road and for "tearing[a] down rates of toll posted on the gate."

Bridges to be Built.

Gate-keeper's Salary Increased.

February, 1813, Three Commissioners to Take Place of Managers.

Slaves to be Purchased to Work on Road.

Fines for Destruction of Posted Toll Rates.

By the act[24] of February 2, 1815, a manager from Madison County was appointed, at two dollars per day, to take charge of the road from Cumberland Gap "leading

February, 1815, Manager Appointed.

[a] See note, p. 49.

to the Crab Orchard, the Grassy Lick on said road," and "as far as the foot of the north end of what is called the Big Hill, on said road, and to Madison court-house." The manager was to divide the road into four parts, with a surveyor for each, at one dollar and fifty cents per day. He was to employ no fewer than eight able-bodied laborers, who were to use the "public tools." He was also to call upon each "tithable" living within two miles of the road to work four days each year with proper tools. The supervision and "investigation" of the manager was the duty of three commissioners, at two dollars a day, one each selected biennially by Madison, Rockcastle, and Knox county courts. The governor was to appoint annually, at a salary of two hundred and fifty dollars, the keeper of the gate, which was to stand in Knox County. The toll was revised:

Road divided into Four Parts with Surveyor for Each.

Three Commissioners Appointed to Supervise the Manager.

Salary of Gate-keeper $250.

Toll Rates Revised.

Wagons	$1.00
Each horse or mule in team	.06¼
Four-wheel riding carriage and team	1.50
Two-wheel riding carriage and team	.75
Two-wheel cart	.25
Horse or mule	.06¼
Head of neat cattle	.03
Sheep or hog	.01
Persons above ten years	.06¼

It was further enacted that the manager be required to ask for a settlement of accounts from the former commissioners or directors and the gate-keeper, and if he found they had any money due "the institution" he was to collect it and use it exclusively for repairing the Rockcastle bridge

and keeping it in repair. If there should be any residue it was to be used for building bridges elsewhere on the road.

Further Provision for Bridges.

Evidently the bridges were for some reason unsatisfactory or insufficient, for by an act[25] of January 11, 1816, the manager of the Wilderness Road was directed to have built two good and sufficient ferry-boats, and to station them at each of the crossings of Rockcastle River. He was to appoint a fit person to attend each boat, with hands enough to carry all passengers who might wish to cross.

January, 1816, Ferries Established at Both Crossings of Rockcastle River.

The ferry rates were fixed as follows:

Ferry Rates.

Wagon and team	$0.50
Two-wheel carriage	.25
Man and horse	.12½
Single horse, mare, or mule	.06¼
Head of cattle, sheep, or goats	.01
Foot passengers	.06¼

Money for the project was to be taken from the sum set aside for keeping the Rockcastle bridge in repair, and the ferry-boat receipts, after the payment of expenses, were to be placed to the account of the "turnpike institution." The ferries were not to be established in this manner, however, unless the owners of the land refused to build and operate them under the conditions stated.[a]

[a] An act of January 31, 1812, required owners of ferries to keep the roads leading to and from them, between low- and high-water mark, in good repair. (Littell's Laws, Vol. IV, p. 361.)

A ferry established where the main road crossed the river (vicinity of Livingston), and later known as Gresham's Ferry, was maintained until after the river was crossed at the same place by the Louisville & Nashville Railroad (1883) and the tolls were regulated by the State. (See Kentucky Acts, April 29, 1880.)

February, 1817, Three Managers Appointed for the Road, one from Each County.

The act[26] of February 4, 1817, provided that the section of the Wilderness Road between the northern part of Big Hill and the intersection with the Crab Orchard-Cumberland Gap road was to be kept in repair by the Madison County Court, through a manager appointed by itself. The new officer was to have one-fourth of the toll receipts, and the same proportion of the tools belonging to the road and of the money then in the hands of the gate-keeper. The road between Grassy Lick and the Madison road was in like manner placed under the jurisdiction of Rockcastle County and the remainder under that of Knox County, the former to have one-fourth and the latter one-half of the money and tools.

From this time until improvements were undertaken by the Board of Internal Improvement there was no important legislation[a] in behalf of the Wilderness Road, with the exception of an act approved January 29, 1829, which provided that a surveyor and a general superintendent of the road be appointed annually by the governor, and

[a] Legislation was confined chiefly to minute details in regard to the changes in route, toll, and labor exemptions, and appropriations for Rockcastle River bridges. Thus: November 17, 1824, provision was made for changing a part of the route over Big Hill, Madison County, and the road was made to lead from the foot of the hill up Station Camp Creek to intersect the turnpike, because it was "difficult to be kept in repair in consequence of the timber convenient to said road being entirely exhausted, and thereby rendering it extremely difficult to ascend or descend said hill in the winter season." The act of January 12, 1825, directed that a part of the road through Rockcastle County be moved out of the bed of Roundstone Creek and run above high water. By the act of November 18, 1823, the residents three miles from the road in Madison and Rockcastle counties were not required to work on it unless directed by the courts, but the act of January 12, 1825, required all persons living within a distance of

an act of January 11, 1830, which repealed this law and authorized the establishment of two new tollgates. One of these was to be erected on the Crab Orchard road, at or near the crossing of Rockcastle River, and the other on the Madison road near that river. The gate-keepers were to be appointed, with a salary of one hundred dollars, by the courts of Rockcastle and Madison counties. The courts of Madison, Rockcastle, Laurel, and Knox counties were each directed to appoint an overseer for the section of road within the county. The "tools, carts, and oxen" belonging to the road were to be turned over by the superintendent to the different overseers. Tolls from the new gates were to be expended upon the respective sections upon which they were located, from Grassy Lick[a] and the foot of Big Hill, to the intersection at Pitman's (London). The old gate was to furnish funds for the section between Pitman's and Cumberland Gap, and also for the Barbour-

1830, Two Additional Tollgates Authorized.

from one-fourth of a mile to five miles to work on the road four days each year. An act of December, 1823, provided that thereafter the gate-keeper should demand no toll from the inhabitants of Harlan County, either for themselves or their property, notwithstanding any law to the contrary. February 24, 1834, a law was repealed which had permitted the inhabitants of Rockcastle, Knox, Harlan, and Laurel counties to pass the turnpike without payment; exceptions were made in the case of persons subject to labor on the road, their families and property, all persons attending religious worship on the Sabbath, the manager or superintendent of Rockcastle River bridge, and the laborers, wagons, carts, and beasts of burden employed on the bridge. The completion of bridges over Rockcastle River was provided for by an act of January 29, 1830, which appropriated $2,000 for the one on the Richmond branch and $2,500 for that on the Crab Orchard branch. See also acts of December 31, 1831, and February 22, 1834. (Kentucky Acts.)

[a] By an act of January 28, 1830, the stretch of road between Grassy Lick and the town of Crab Orchard, Lincoln County, was included in the Wilderness Road, and provision made for the improvement of same.

ville road and the road to Goose Creek salt-works.[a] The tolls were fixed, and there were exempted the citizens of Rockcastle County and persons going to and from the Goose Creek salt-works. The debts of the road were to be paid from the tolls—the Madison road to pay one-fourth, the Crab Orchard road one-fourth, and the old gate the residue.

1836-1843, Improvements under Board of Internal Improvement—Joint Stock Company.

Between 1836 and 1843 improvements[b] were accomplished under the board, acting through a joint stock company in which citizens along the road were shareholders. The following extract is from the report[27] of the chief engineer, dated December 31, 1839:

Report of Engineer of Work on Road.

"I have, during the year, located and placed under contract the grading, digging, and bridging of 25.55 miles of the Crab Orchard and Cumberland Gap Turnpike road: also the building of a bridge of 150 feet span over the Cumberland River, and a bridge on the Rockcastle River of 130 feet span. The president and directors, under the advice of the chief engineer, selected the worst points on the whole line of road, and they have so made

[a] See p. 127; also Note b, p. 123.

[b] The plans called for a dirt turnpike except along the Rockcastle-Kentucky River divide, where a short stretch was to be macadamized with limestone from the ridge. The road was to be thirty feet wide, clear of drains, except at Cumberland Gap, where the width would be twenty-six feet. The maximum grade would be four degrees. The improvements were to render the entire line from Crab Orchard to Cumberland Gap available for wagons of from six to seven thousand pounds burden, and relieve the stock-traders with the Southeastern States from great difficulty and loss of time in passing the mountains and rivers. For details see House Journal, 1839-1840, Appendix, pp. 305–308.

the contracts as to apply the $40,000[a] taken from Rockcastle River to that portion of the road common to the Richmond and Crab Orchard and Cumberland Gap road, or to that portion between Mrs. Pitman's (London) and the Cumberland Gap. The works under contract amount to $104,332.67. Individuals have taken a sufficiency of stock to complete this work, after making an appropriation of the $40,000; and the State to pay two for one on the residue. When this road shall be improved as now under contract, I know of no road better adapted to the wants of the country; nor do I know of any work of the kind that deserves the patronage of the State to a greater extent. The present acclivities of the hills are so steep that 2,500 lbs. are more than an average load for a wagon and five horses. The distance from Crab Orchard to the Cumberland Gap, as located for a road, is 100 miles, and the towns passed through are Mt. Vernon, London, and Barbourville."[b]

Contracts amounting to $104,332 placed for Improvements between Crab Orchard and Cumberland Gap.

Twenty-five hundred pounds more than Average Load for Five-horse Wagon.

By the close of 1843 the sum of $6,655.75 had been expended upon the improvement of the Wilderness Road. The money was paid by the State, as the stock company

[a] This appropriation had been made to Rockcastle River with the provision that it was to be expended on the Wilderness Road in case the stream were deemed by the board "unworthy of improvement."

[b] This change in the location of the route via Barbourville decreased the grade, but increased the mileage, between London and Cumberland Gap. The line of the old road, as surveyed by the Louisville & Nashville Railroad between London and Flat Lick, extended via the Laurel River, Lick Creek, and Knox Fork of Richland Creek into the valley of the Richland. Then the course, known as the "old State road cut-off," with a grade of seventy-nine feet per mile for 6,100 feet, ascended to a pass in the Kentucky ridge and descended, with a grade of sixty-six feet per mile, for 6,400 feet into the valley of Collins Fork. It passed

$6,655.75 Expended by State up to Close of 1843.

had proved unsatisfactory. A report of the board[28] December 31, 1841, showed that contracts had been made with the understanding that contractors were to receive a part of the pay in road stock, and in consequence of such agreement the prices were more than a fair value for the work.

Individual Subscriptions Not Paid.

There was also great difficulty and delay encountered in obtaining money from individual subscribers[a]; some of those who had subscribed large amounts were either unwilling or unable to pay. By act of January 27, 1844, the charter of the "Crab Orchard and Cumberland Gap

over a low ridge into the valley of Little Richland Creek, which it followed for three miles, crossing a low ridge into the Fighting Creek valley, which it traversed for two miles. Crossing Turkey Creek and Stinking Creek to Flat Lick, it continued via the right bank of the Cumberland River to the crossing near Pineville and on through "Pineville Narrows" (3,000 feet) via Patterson's Branch to Cumberland Gap. Melish, in 1814, gives the following distances on the road:

Crab Orchard to Hazel Patch	26	miles.
To Riceton	8	"
Racoon Springs	10	"
Middleton's	18	"
Flat Lick	6	"
Cumberland River	11	"
Cumberland Gap	13	"

The new line, noted in 1822 by Melish, was identical as far as Richland Creek, but it passed down that stream to Barbourville and continued along the right bank of the Cumberland River, which it abandoned after crossing Fighting and Stinking creeks and passed along the "cut-off bend" to Flat Lick. The railroad surveys, showing shorter distances because of tunnels, measured for the old route between London and Cumberland Gap fifty-four miles and for the new fifty-five miles. These routes, according to the engineer, were the shortest, had the lowest grades and lightest curvatures, and could be used for a railroad at less cost than any other permitted by the topography of the country. (John Melish, Description of Roads of United States, 1814; Report of Directors of Louisville & Nashville Railroad, 1869–1870, pp. 65–70.)

[a] The turnpike company was chartered February 29, 1836, and individual subscriptions were made soon afterward. Commissioners in charge of these reported as subscribed during 1836—in Knox County, July 5th, $11,150; in Harlan, June 30th, $3,000; in Rockcastle, May 21st, $5,700. (Correspondence, Commissioners to Board of Internal Improvement, File Room, State-house.)

Turnpike Road Company" was repealed and laws in force previous to the incorporation were reënacted, thereby relegating the road, now burdened with debt, to the various county courts. An act of March 2, 1844, appointed a commissioner to take charge of the road until overseers were appointed by the counties.[a] Since that time the road, although nominally under the supervision of the State until 1880,[b] when the tollgates were abolished, has been controlled by the counties through which it extends.

1844, Control given to Counties.

[a] The tollgates on the road were at this time held by the State at a much higher figure than the one on the Big Sandy road. (See p. 145.) An act of March 2, 1844, required a minimum sum of $3,000 from a lessee of the Knox County gate, or that a keeper be appointed.

[b] Legislation, chiefly in regard to the tollgates, continued up to that time. An act of January 3, 1865, authorized the Knox County Court to erect a "turnpike" on the Wilderness Road, "on the waters of Yellow Creek," at the present site of Pineville, Bell County. Here the same toll rates were to be collected as at the other gate in Knox County. By the act of January 9, 1868, the governor was to appoint tollgate keepers in the counties of Knox and Bell for a term of four years. By the act of April 21, 1873, the tollgate at Pineville was abolished; there was to be but one gate on the road from Cumberland Gap to the forks of the road (John Pitman's, near London, in Laurel County), and this was to be at Flat Lick, Knox County, or between Flat Lick and Cumberland Ford in Bell County. It was to be sold annually to the highest bidder by public outcry, notices having been posted as to time and place, at Pineville, Barbourville, London, and Flat Lick. The toll rates were fixed by the act, and the inhabitants of Bell and Knox counties exempted from payment. The proceeds from the sale of the gate were appropriated to the care of the road between its forks and Cumberland Gap, and divided among the counties according to the road mileage within the borders of each, subject to the order of the county courts. Two-thirds of the amount was to be used for the payment of the road debt and one-third for further improvements. The counties were each to appoint an overseer, whose duty it was to summon all tithables living within a mile of the road to work upon it for a length of time not to exceed fourteen days in the year, under a penalty of $2.50 a day for non-compliance with the summons. The county court was to appoint a commissioner to collect money belonging to the road from the county judges and from the gate-keepers, present and former, and to pay the same to the road's creditors. By the same act, similar provisions were made for the annual sale of the gate on the Crab Orchard branch in the vicinity of Livingston. By the act of April 10, 1878, Laurel County was authorized to appoint a commis-

By 1848 road had Lost Significance as Transmontane Route.

By the close of this period the Wilderness Road had lost practically all significance as a transmontane route, and was of mere local importance. This is indicated in the report of the board for 1848[30]:

Report of Board, 1848.

"This road has been given up to the management of the counties through which it passes, and . . . it is not now within the control of this board. But . . . this road, with many small roads leading to and from the salt-works, need the aid of the State in making them more useful to that section, . . . for although it may be said these roads do not directly benefit the people of a rich and fertile agricultural district of land,[a] yet the

sioner to collect and disburse the funds from the gate on the Madison branch, from John Pitman's to the terminus in Madison County. He was also to sell the gate annually and apportion the funds among Laurel, Rockcastle, and Jackson counties, to be used for payment of the debt on the road. (Kentucky Acts.)

An act of May 1, 1880, abolished the tollgates on the Wilderness Road and its Madison branch. No tolls could be collected after the expiration of the leases then existing, and the gates not leased were to be removed immediately by order of the county coutrs. The courts of Bell, Knox, Laurel, Rockcastle, and Jackson counties were directed to appoint overseers and allot hands to work on the road in each county according to the general State law. The rates at this time were about one-third higher than those fixed by the first law regulating tolls, more than three-quarters of a century before (see act of April 21, 1873). Salt and livestock traffic, formerly the chief source of revenue, had practically disappeared. By an act of 1871 salt wagons had been exempted from toll.

[a] Transmontane traffic on the road probably reached its height during the decade 1830–1840. In 1830 the temporary Board of Internal Improvement recommended to the Legislature, as a matter of "primary importance," the improvement of the road, since into it led the three roads from the State—that from Newport, which passed through Georgetown, Lexington, and Richmond; the one from Louisville to Crab Orchard; and the one from Elizabethtown. (House Journal, 1830, p. 164.) Speed states that one of the traveled ways extended from Limestone to Crab Orchard; that certainly as late as 1825, and perhaps later, goods in great quantities were hauled over this road, starting at Limestone and passing through Lexington and Danville; that they were taken through Cumberland Gap into the Tennessee Valley and Alabama; that citizens of Danville, alive in 1894, could remember the passing through the town wagons covered

board feel satisfied that the great salt wells of that mountain country are now of vast importance to those in its vicinity; and if properly encouraged by good roads, will become a mighty power in expanding the resources of the entire State."

Tributaries

Tributaries of Wilderness Road.

The tributaries of the Wilderness Road were improved chiefly with the object of facilitating the transportation of salt[a] from numerous works located in the vicinity of Manchester, Clay County. This point became, at an early date, a center from which roads radiated in all directions, and during this period the salt industry reached its height and was the source of considerable traffic with adjoining counties, both in Kentucky and Tennessee.

1802, Roads to Salt-works Improved.

By an act[31] of December 21, 1802, provision was made for opening a road from Richmond, in Madison County, to the salt-works on Goose Creek owned by John Patrick

with canvas and drawn by horses with bells on their harness; that large droves of hogs and mules, destined for markets in the Carolinas, Georgia, and Alabama were also driven over the road. (Speed, The Political Club, p. 19, note.)

According to Collins (Vol. I, p. 44) there passed Cumberland Ford in 1838, bound for the Southern market:

4,039 horses and 3,177 mules, valued at	$577,280
4,540 beef cattle, valued at	227,450
68,764 hogs, valued at	962,696
3,250 sheep, valued at	13,000

[a] The State made special provision for all roads leading to salt-works. By the act of December 18, 1801, the condemnation of land was provided for in the case that owners or occupiers of a salt lick, who were desirous of conveying the salt water to timber by means of troughs or otherwise, could not do so conveniently without passing over the land of others. (Littell's Laws, Vol. II, p. 438.) Condemnation of land was provided for also when it was inconvenient to convey the wood for the furnaces without trespassing, by the act of February 7, 1820. (Kentucky Acts.)

and others and "generally known by the name of Langford's Lick."[a] Commissioners were appointed to receive subscriptions in aid of the road, which was to be the "nearest and best way," and was to afford a safe passage for "waggons carrying one ton weight."

Langford's Road.

This road, known as "Langford's," branched from the main Richmond road near the crossing of Rockcastle River.[32] By the same act other commissioners were appointed with like powers for "cutting" a wagon road and keeping same in repair, from Pulaski Court House to the said salt-works and also from that Court House to Outlaw's salt-works on Collins Fork.

January, 1810, Turnpikes on Langford's Road authorized for Two Years.

By the act[33] of January 31, 1810, turnpikes were to be stationed for two years, and "no longer," on two roads which led from the "State road to Goose Creek salt-works" in Clay County, because the "roads were very bad" and there were "but few inhabitants living near" them. The more important of the two roads,[b] Langford's, extended

[a] There seems to have been an established route, probably an original buffalo trace into the Warrior's Path, which as early as 1798 led from Pulaski County via the ridge between Buck and Skegg's creeks to the springs on Collins Fork and Goose Creek. (Littell's Laws, Vol. II, p. 189.) The commissioner of the Wilderness Road reported in 1802, previous to the above legislation, that the road from Madison County to Langford's appeared to be totally neglected. (Garrard Correspondence.)

[b] The other road led from "Hale's old place on the Wilderness Road in Knox County" to the Goose Creek upper salt-works in Clay County. By the act, Knox County was directed to establish the turnpike and to use the receipts to maintain the road. The toll rates were the same as on Langford's road.

From "Hale's" the road led to "Ephraim Moore's" on "Lin Camp Creek," and from there to the mouth of Laurel River. (Littell's Laws, Vol. V, p. 426.)

A previous act, approved February 16, 1808, authorized the opening of a road from Knox Court House, which was to intersect a road from "Langford's" to Pulaski Court House at or near Benjamin Thurman's. (Littell's Laws, Vol. III, pp. 4–64.)

from Madison and Lincoln counties to the "lower lick," or "Lankford's salt-works." The turnpike was to be erected by the Clay County Court and the income from the gate was to be expended on the road under its direction. The toll rates were fixed:

Toll Rates Fixed.

Wagon, team, and driver	$0.50
Every horse, mare, or mule not in a wagon	.06¼
Cart and team	.25
Yoke of oxen not in a cart	.12½

February, 1812, Time Extended.

The act[34] of February 8, 1812, directed that the turnpike be continued two years longer from January 31st of the same year. All salt-packers going to and from the salt-works were exempted from toll.

January, 1813, Time Extended Five Years.

The time was further extended to five years by the act of January 27, 1813, which instructed the Clay County Court to appoint a commissioner to oversee the road.[a] He was to receive for his services one dollar per day, taken from the toll money. All persons living within five miles of the road, from its intersection with the State road near

[a] Small amounts from the tolls collected on the main Wilderness Road were at various times appropriated to its tributaries, especially to those leading to the salt-works.

An act of January 26, 1811, provided that "Whereas, a number of waggons and pack-horses, passing to and from the lower Goose Creek salt-works, in Clay County, travel but a few miles along the Wilderness Road, and have to pay full toll at the turnpike on said road," one-half of all the money so collected was to be appropriated to clear and repair the road from Andrew Craig's on the Wilderness Road to Lower Goose Creek salt-works in Clay County. The Clay County Court was directed to appoint a fit person to keep the road in repair. (Littell's Laws, Vol. IV, p. 242.)

By an act of February 2, 1815, the provision that one-half of the money for tolls paid by "waggoners or pack-horse men" be applied to the repair of this road was repealed. (Littell's Laws, Vol. V, p. 201.)

By an act of February 10, 1816, one-half of the toll received from "waggoners, pack-horsemen, or passengers," traveling to or from Saltburg on the Cum-

Rockcastle bridge to the Goose Creek salt-works, who were liable to road duty, were to labor three days annually.

Toll Exemptions.

The act exempted from the payment of toll every person subject to labor on the road, their families and property; pack-horses going to and from Goose Creek salt-works for salt; post-riders, expresses, and their horses. The turnpike privilege was extended at various times.[35]

1817, Road from Irvine to Wilderness Road via Manchester.

The construction of a road[a] from Irvine, on the Kentucky River, to the Wilderness Road by way of the Clay County salt-works was ordered by the act[36] of February 4, 1817, since, the act reads, "It is represented to the present General Assembly that a road from Estill court house, passing by the Goose Creek salt-works and to intersect the present State road at some point near the Cumberland River, will be of great service to the citizens generally on the north side of the Kentucky River"; and since "it is further represented that said road will be much nearer than the present State road that leads through Knox County, and that it will lead through a part of country uninhabited." Commissioners were appointed who were to

berland River, or to or from Barbourville, was to be appropriated to "clear out or repair" the road from Colonel Arthur's on the Wilderness Road to Somerset in Pulaski County, and was to be expended under the direction of the Knox County Court. By the same act one-half of the toll paid by persons going to or from John Gilbert's salt-works in Clay County were to be expended under the direction of the Clay County Court for the use and benefit "of the road leading from the State road to the said salt-works." (Littell's Laws, Vol. V, p. 392.)

For later legislation see acts of January 29, 1840, January 27, 1843, and January 27, 1844.

[a] This was the line of the old "Warrior's Path."

raise the necessary funds by opening subscriptions. A turnpike was to be erected in Estill County and another in Clay County. The tolls were to be fixed by the county courts, which when the commissioners had completed their work would "take upon themselves the management of said road." The road became an established route from Mt. Sterling by way of Manchester to the main road at Flat Lick. There was a good deal of legislation[37] regarding it.

Two Tollgates Authorized.

Another road was designed by the act of January 18, 1842, which directed that commissioners be appointed by the State, and qualified before a justice of the peace, to "view and mark out the most practicable way for a road from the mouth of Laurel River, passing through London to Daniel Bate's salt furnace on Collins Fork of Goose Creek." The road was to be at least twenty feet wide. The county courts were to meet the expense and to appoint overseers, whose business it should be to engage the labor.[a]

1842, Road from Mouth of Laurel River, Head of Navigation on the Cumberland, to Saltworks, via London.

By the close of the period there were three main State roads, from the vicinity of Manchester, intersecting the Wilderness Road, which had been maintained by tollgates erected upon them or by tolls collected on the main road. One led via Burning Springs, Clay County, crossing the Madison road near Hazel Patch. Another passed up Otter Creek of Goose Creek and down Stinking Creek

[a] There were other small appropriations made to a number of less important routes. Thus an act of January 15, 1831, directed that $200 in land warrants be expended on the road leading from the mouth of Straight Creek (Pineville) to the Red Bird salt-works in Clay County.

to the Cumberland River. The third led to Somerset via London, with a branch passing through Raccoon Springs on Laurel River.[38]

Roads to Coal Mines.

Besides roads leading to the salt-works there were a number of other tributaries, local routes, which were given occasional aid.[a] The most important of these extended to coal mines near the mouth of Laurel River, the head of descending navigation for coal boats on the Cumberland.[b]

[a] By an act of December 9, 1820, provision was made for opening a road from "Jackson's" in Knox County through Williamsburg in Whitley County to the Tennessee line, and for the erection of a tollgate upon it. By an act of February 2, 1833, there were appropriated, to a road from London via Williamsburg to the Tennessee line and to assist in building a bridge across "Lyn Camp Creek" on the road, land warrants, which were to be located in Whitley County or on "unappropriated land opposite said county" between "Walker's line and the true meridian." (See Note c, p. 5.) By another act of the same date a similar appropriation was made to a "post-road" from Williamsburg to the Big South Fork of the Cumberland.

By means of small appropriations roads were established even in the inaccessible upper Cumberland Valley. By an act of January 16, 1829, treasury warrants of the Kentucky Land Office for 10,000 acres were appropriated to Harlan County, to be used by the county court for opening a road from Cumberland Ford to Harlan Court House and to the Virginia State line and up the Poor Fork of the Cumberland. The issue of additional land warrants for 4,000 acres, in the name of the county court of Harlan, was authorized by the act of January 30, 1834. They were to be located on any vacant and unappropriated land in the county, and used to improve the roads from "Harlan Court House to Crank's Gap, and from John Cawood's up Martin's Fork, via George Spurlock's, to the mouth of Crank's Creek, in a direction to the Virginia line." These warrants, which were to be issued without fee, would be void if found to be in conflict with a survey or grant previously made. Two commissioners were appointed to sell the warrants and appropriate the proceeds to the roads. Before entering on their duties they must enter a bond of $200 with approved security. They were to receive for actual time of service seventy-five cents a day, to be paid out of the warrants. No survey less than fifty acres was allowed, and the warrant might not be sold for less than five dollars per one hundred acres. By the act of February 22, 1834, 6,000 acres were appropriated in the same manner to build a bridge across Straight Creek, at or near its mouth. March 1, 1836, an appropriation of $1,000 was made to improve the road from Cumberland Ford to Mt. Pleasant (Harlan). (Kentucky Acts.)

[b] Improvements were begun on the upper Cumberland River at about this time. Although attempts were made to ship farm products, coal was practically

The opening of a road from London in Laurel County to the mouth of "Big Laurel River" was ordered by act of February 2, 1833. By act of January 30, 1847, the money and land warrants for the road were transferred to the road via London to Bate's salt furnace.

An act of February 25, 1835, appropriated ten thousand acres of land to Pulaski County for the opening of a road from Somerset to "coal mines on or near Cumberland River."

Big Sandy–Greenbrier Road

Big Sandy Route second Improved by State, December, 1802.

A Big Sandy route was the second of the main lines to be improved by the State. The mouth of the river, instead of as formerly the ford near the forks, now became the objective point, a Virginia road through Teays Valley affording connection with the Greenbrier road, which terminated near the falls of the Kanawha.[39]

the only article of commerce on the mountain section. The principal mines were located along the river, between the mouths of Rockcastle and Laurel rivers. A report of Captain Howard Stansbury, United States Engineer, in 1834, reads: "The point (mouth of Laurel) . . . from the geographical position would naturally become a depot for shipment. . . . Lying in the direct route from the upper to the lower country it must before long become the point of deposit for all articles of trade that depend upon the river for their transportation. The country, especially between this point and Barbourville, is particularly adapted to the favorable location of roads, being high and dry and at a short distance back from the river remarkably free from anything that would render their construction expensive. I was informed by many of the inhabitants that could a good and certain navigation be secured to this point on the river they would be willing and glad to construct the necessary roads for the transportation of their produce at their own expense."

Above the mouth of Laurel, shipments of any kind were impossible because of the obstructions in the stream, and as far as the falls in Whitley County the gorgelike character of the valley rendered access to it by road-building extremely difficult.

Commissioners directed to Open Subscriptions.

The act[40] of December 13, 1802, authorized the opening of a road from Mt. Sterling or Paris to the Big Sandy River, "in a good direction to communicate with the Greenbrier road in Virginia, which strikes the Kanawha River at William Morris's,"[a] since "a road in that direction would save a considerable distance in travelling from this country into the Eastern States, and . . . the opening of said road would be of great public advantage." Five commissioners were chosen to employ one or more fit persons, who were to view and mark out the nearest and best way and make a report of the same. For their services the "viewers" were to be paid any sum not exceeding eighty dollars from the public treasury. The commissioners were directed to open subscriptions, and when in their opinion sufficient money had been thus obtained, to contract with a proper person for opening such a road, "in such manner as the sum subscribed" would "enable them." Funds might be recovered from delinquent subscribers by process of law.[b]

Fit Persons to View the Way.

[a] The New-Kanawha trail was recommended by Gallatin, April 12, 1808, as one of the routes to be improved, to facilitate the connection between the seaboard and the Ohio River. According to his report the distance from Richmond to "Morris's on the Kanawha, below all the falls of that river," was 210 miles. (Report of the Secretary of the Treasury on the Report of Public Roads and Canals, in pursuance of a Resolution of the Senate, March 2, 1807–April 12, 1808.)

[b] There seems to have been no repairs accomplished under this act, as a bill for appropriations to the road which had passed the House was rejected in the Senate, December 22, 1803. (Senate Journal, 1803.)

The first "Stage Route" in Kentucky was opened in 1803 on this road, from Lexington via Winchester and Mt. Sterling to Olympian Springs in Bath County. (Collins, Vol. I, p. 514.) The Kentucky Gazette, August 23, 1803, advertises

Transportation and Commerce

November, 1804, Road from Triplett's Creek to Mouth of Big Sandy to be opened in a Year.

The act[41] of November 24, 1804, provided for the opening of a road "from Thomas Green's, near the mouth of Triplett, on Licking River, to Big Sandy River." It was to pass the Little Sandy salt-works and to intersect the road opened by the State of Virginia. The law reads: "and great advantages will be derived to the citizens of this Commonwealth, as it is the most direct way to the Federal City and the Atlantic States, and as it will be of great convenience to drovers and travellers, in their commerce to the Eastern ports." Three commissioners were named to let the opening of the road to the lowest bidder, provided the lowest bid did not exceed one thousand dollars, after they should have advertised for two months at the court-house doors of Montgomery and Fleming counties that the letting of the road would take place on the first Monday of the following March. The undertaker was to make the way as marked by John M'Intire, "fifteen feet wide, removing all fallen timber, and to dig down the banks of creeks," so that it would be "of easy passage

the line. J. Kennedy respectfully informed the public that he had commenced running his "Stage Coach" on the line between Lexington and the Olympian Springs at Mud-Lick, and proposed starting regularly from Lexington every Thursday morning at four o'clock precisely, and to arrive at the Springs the same day. The rate to the Springs was twenty-one shillings, to Mt. Sterling fifteen, and to Winchester nine. Each passenger was allowed ten pounds baggage and for excess was charged three cents per pound for the whole distance, two cents from Winchester, and one cent from Mt. Sterling. The owner also offered to convey packets of papers, etc., at reasonable rates. He anticipated meeting encouragement in the undertaking, as he had expended upward of $2,000 in starting the enterprise and would continue to add every convenience for the accommodation of passengers. The stage was also to be run between Lexington and Frankfort during the next session of the Assembly.

to horsemen and drovers, and to have the said road cleared out in twelve months from the day of undertaking the same."

1806, to be Converted into Wagon Road.

The road was opened the same year, with an expenditure of four hundred dollars.[42] It was ordered to be converted into a wagon road by act[43] of December 9, 1806, which directed that it be "cleared at least thirty feet wide . . . of both standing and fallen timber and other obstructions occurring therein; and that all banks . . . be dug away in such manner as to make said road conveniently passable by waggons and wheel carriages." The funds were to be raised by subscription as before, and when five hundred dollars had been so obtained the commissioners were to let out the work by public auction to the lowest bidder, provided he asked a sum not exceeding $1,100. The undertaker was to give bond with security of twice the contract sum, and upon the completion of his task was to receive from the commissioners all the money collected by subscription and from the State treasury any balance due him, as soon as he should have proved to the court of Montgomery, at a time when at least seven justices were present, that he had performed "said undertaking agreeably to the provisions of this act." It was further enacted that courts of the counties through which the road passed should "possess as complete jurisdiction over the same as in case of other roads by the laws of this State."

$1,100 Maximum Amount to be Expended upon Road.

The improvements were to have been completed within a year, but the two undertakers were allowed further time of three months because "the high water having injured the bridge since they had finished it, it could not be received by the county court of Montgomery, according to contract." The act,[44] approved February 23, 1808, also permitted them "to raise three hundred dollars by subscription, in addition to the sum already subscribed," and it authorized "the county court of Montgomery to appoint four commissioners to raise money by subscription to keep the road in repair."

February, 1808, Time for Completion Extended.

An additional $300 authorized to be Raised by Subscription.

The act[45] of January 30, 1810, provided for a turnpike on this road, since "the roads leading from Triplett's Creek, on Licking River, and from Lewis's Mill, on Fox's Creek, in Fleming County, to the mouth of Big Sandy," passed through a tract of country so thinly inhabited that they could not be kept in repair in the ordinary way; and it was represented that improvement on the roads "would conduce to the public advantage." The act named six commissioners, who were to receive subscriptions either in money or property to a maximum sum of five thousand dollars, and who were to erect or cause to be erected a tollgate at some convenient place on the road "leading from the mouth of Triplett to the Big Sandy," and to purchase as much land as necessary for the purpose, not exceeding two acres. The expenses, in case the land and buildings should not be donated, were to be paid either

January, 1810, Tollgate Authorized.

from the subscriptions collected or from the first "moneys accruing to the State from the turnpike." The commissioners were to be remunerated from the same sources, receiving "such a part thereof as the justices of the county court of Bourbon" should award them. After four weeks of advertisement in the public gazettes of Frankfort and Lexington the tollgate was to be farmed out to the highest bidder, and the money taken at the gate—the necessary expenses having been paid—was to be applied to the improvement of the road. The toll rates were fixed, and residents within ten miles, who had worked three days in the year on the road, were exempted from payment.

As indicated above, there were now two forks of the main road diverging near the mouth of Triplett's Creek—one to the Licking River, the other to Fox's Creek. The act[46] of January 25, 1811, repealed the act of the preceding year, which had been found "impracticable to be carried into execution." The new act appointed six commissioners to let the main road and its forks at public auction. They were "to take bond and sufficient security, in the penalty of five thousand dollars, . . . for the due and faithful performance of putting the said roads, intersecting the State road at its present fork, in good repair for horses, waggons, and carriages to pass; and to make and keep up . . . all necessary bridges and causeways, and dig down the hillsides," where the roads were on "sideling ground," so that the water would run on the upper side,

January, 1811, repealed former act.

Six Commissioners to let Main Road and its Forks at Public Auction.

and were to keep the roads in good repair. The undertaker was granted the privilege of erecting a turnpike gate on any part of the roads, provided it was not located within ten miles of the Little Sandy salt-works. The necessary land, not to exceed twenty acres, was to be condemned for the purpose by the court of the county in which the gate was to be situated, and the expenses were to be defrayed by the keeper. The toll was fixed, but none was to be demanded until the keeper had received from the commissioners a certificate to the effect that the roads were in sufficient repair. The certificate might be granted any time before the first day of November, 1812, at which date the improvements must have been completed. The commissioners were allowed one dollar and fifty cents a day for their services, to be paid them by the keeper of the road and turnpike. The toll rates were practically the same as those fixed by the preceding act, which was repealed.

Tollgate again authorized.

Toll Rates.

Persons	$0.06½
Horse, mare, or mule	.06½
Carriage or cart with two wheels	.25
Carriage or wagon with four wheels	.50
Head of neat cattle	.03
Hog	.01

There were many exemptions—every post-rider, express and their horse, children under ten years, women residing within ten miles of the gate, persons packing salt from the Little Sandy salt-works and their horses and mules, horses necessarily "attached and harnessed," and two

Exemptions.

persons were privileged for the "conveyance of each carriage."

Road was "established" January 31, 1812.

The act[47] of January 31, 1812, prohibited the moving or altering the turnpike road from Triplett's Creek to the mouth of the Big Sandy without the consent of the keeper and of the majority of the commissioners. Without their consent, also, no one might be permitted, "by fences or other obstructions, to prevent the said keeper from having said road thirty feet wide on good ground and sixty feet wide . . . on low or wet ground, . . . under a penalty not exceeding ten dollars for every such offence." Any person who obstructed the road by cutting down a tree, or otherwise, would be liable, before any justice of the peace, to a maximum fine of five dollars for each offense. Such fines were to be paid to the keeper. As some of the commissioners were so inconveniently situated that it was difficult for them to have a meeting, the act empowered the county court of Greenup to appoint two others with the same powers and compensation.

No Important Legislation until 1830.

Until 1830 there was no other legislation of importance in regard to the road,[a] which now extended from Owingsville and was an important connection between a road from Lexington and Mt. Sterling to Owingsville[b] and the

Road known as "Owingsville and Big Sandy."

[a] During this interval the management of the road was unsatisfactory at times. Thus by an act of January 29, 1829, the "representatives" of the turnpike keeper were summoned to court to show cause why the road had not been kept in repair according to contract. (Kentucky Acts.)

[b] The old route to the south via Olympian Springs was authorized to be examined, as an alternative road for improvement, by an act of January 29, 1830, which was repealed, however, the following year. (*Ibid.*)

Virginia road. The latter was in process of improvement as a State turnpike from the mouth of the Big Sandy, via the falls of the Kanawha and the Greenbrier country, to the head of navigation on James River.[48]

1831, An Appropriation of $1,000 in Treasury Warrants.

By an act of January 15, 1831, commissioners[a] were appointed to open subscriptions in money or labor, to be expended in repair of the "Sandy road" from the mouth of Big Sandy to John Rice's in Bath County. Labor was to be estimated in subscriptions at fifty cents per day. As soon as one thousand dollars was subscribed the State was to pay a like sum in treasury warrants. When the repairs were completed the most eligible site on this section was to be selected for a turnpike and the rates of toll were fixed. The keeper was to receive a maximum salary of one hundred dollars. The county courts were directed to lay off the roads into precincts and appoint overseers, who were to call out those liable to road duty to work at least six days in each year and "oftener if necessary." This act was amended February 1, 1834, and three

Tollgate Authorized.

[a] The accounts of the commissioners were rendered February 5, 1835, as follows:

Total expenditures	$2,510.30¾
Tollgate receipts	510.30¾
Legislative appropriation and individual subscriptions	2,000.00
Net amount of tolls expended on road and yet in hands of gate-keeper	150.00
Credit claimed for service rendered by commissioners at 75 cents per day:	
J. M. Rice, 36 days	27.00
H. S. Powers, 40 days	30.00
G. Scott, 40 days	30.00

(House Journal, 1834–5, p. 221.)

1834, $10,000 Appropriated.

commissioners were appointed, with power to employ sufficient labor to complete the improvements, for which $10,000 was appropriated. Two additional turnpikes were to be erected between Slate Creek and the Big Sandy, and the same toll rates asked as at the gate already in operation.

Two Additional Tollgates Authorized.

1835, "Owingsville and Big Sandy Turnpike Company" incorporated.

February 27, 1835, the "Owingsville and Big Sandy Turnpike Road Company" was incorporated,[a] and the Board of Internal Improvement was empowered to subscribe $45,000 in addition to the $10,000 appropriated by the former act, provided the road was deemed of "general utility." A survey made by the company was approved by the board and the subscriptions recommended. Of $21,000 subscribed by individuals, however, only $2,000 had been paid and the board subscribed but $1,500, "for want of means" on the part of the State to meet subscriptions.[49]

State Subscribes Stock.

February, 1837, "Big Sandy Turnpike Company" substituted for Commissioners.

An act of February 16, 1837, repealed the sections of all laws that had to do with appropriations to the road. It abolished the board of commissioners, substituting the "Big Sandy Turnpike Road Company," which was to

[a] The capital stock was originally $80,000, which could be increased at will by the president and directors of the company. The shares were fifty dollars each. The charter was granted for making an "artificial road," which was to be leveled and graded with a maximum elevation of five degrees and a width of forty feet, with the artificial or graded section thirty feet where the ground permitted and at no place less than fifteen. The road was to be "ditched at the sides and elevated in the middle" so as to secure a "permanent, fine and smooth road at all seasons of the year," constructed on the principle of the Virginia turnpike known as the "Charleston and Kenawha" of which this was intended as a continuation. The tolls were to be the same as on the Virginia road. The following year, however, the board was directed to fix the rate so that the annual dividend would not exceed twelve per cent of the paid-in capital stock. (Acts. February 27, 1835, February 12, 1836.)

fulfill the duties formerly required of the board, but was required to take no oath nor to give bond for the faithful discharge of the same. The capital stock was $200,000, and the corporation was authorized to sue such individuals or corporations as did not, upon call, pay for the stock subscribed. Subscriptions to the company were made by the State, and improvements, the cost of which was estimated at $207,385, were begun on the road under the direction of the Board of Internal Improvement. By 1838 there had been $87,649.82 expended by the State. The report[50] of the board, dated December 12, 1838, shows the work accomplished up to that time:

Cost of Improvements to be made estimated at $207,385.

Report of Board, 1838, showing Work then Accomplished.

"About 37 miles of this road is finished, and three miles is under contract and not finished. There is about 38½ miles embraced in the charter . . . not finally located. The road which is finished and under contract is in three parts. Next to Owingsville, there is ten miles finished and in use and upon this a tollgate has been erected. Next to this is about 24 miles not finally located; the next ten miles is finished, and the next 14½ miles is not finally located. Of the remaining 20 miles extending to the mouth of the Big Sandy River, about 17 miles is finished; the remaining three miles is under contract. The distance from Owingsville to the mouth of the Big Sandy is estimated at about 78½ miles. The new road, so far as made, passes through districts of country where the greatest obstacles were presented to travel. During

the summer, carriages pass with tolerable convenience over the parts of the old road between the newly made portions. In winter, however, and during the wet season, these parts of the road will not be passable for loaded wagons. As there are no bridges upon the old road, all travel will be suspended, or partly so, during periods of high water. There is a good deal of travel upon this route during summer and autumn. If the portion of the road which is not under contract could be constructed, it would be of great advantage to the northern section of the State."

The act of February 22, 1839, appropriated $50,000 to be used the same year on the road, which was to be completed in 1840.

By 1841 State had expended $150,000 for Improvements on the Road.

By 1841 fifty-one miles had been finished and 27½ miles had not yet been put under contract. The State had now expended altogether $150,000 on the improvements, but the road company had become involved in debt to such an extent that the tolls,[a] after money for the repairs and the payment of salaries had been deducted, were not sufficient to satisfy the creditors. The board, judging

[a] There were at this time five tollgates on the road, but at one only was toll collected. In 1841 the entire care and superintendence of the road was transferred to the board. (Legislative Documents, 1841–1842, p. 243.) A resolution of March 1, 1847, declared that the lessee had not kept the road in good order, and requested the board to rescind the contract and give the road to the counties. (Acts, p. 388.) The contract was accordingly nullified after January, 1848, and letters written by the board to Bath, Fleming, and Carter counties asking them to take charge of the road. Carter refused, and the others signified unwillingness by silence. The board reported (January, 1848) that there was no one at that time under any obligations to superintend and keep the road in repair, and that it must go to ruin if something were not done immediately for its pres-

that this condition of affairs was likely to continue indefinitely under the management of the company, in 1842 let out the road for a term of six years at a rental of $500 per annum, which was to be paid semi-annually to the commissioners of the sinking fund. The Legislature might annul the contract at discretion. A part of the debt incurred by the company was for repair of the road, but most of it was due to contractors for the construction of new sections. These creditors now looked to the State for payment. In consequence, further appropriations were made, the total to the road aggregating,[51] by 1847, $168,783.83.

1842, Board leases Road for six years.

State held Responsible for Company's Debt.

By 1847 State Appropriations to Road aggregated $168,783.

In the year 1849–1850 the board was again empowered to let a part of the road, but objected to doing so on the ground that such an arrangement would be an obstacle to the disposition of the entire road, which was then advisable. No further action was taken by the Legislature, and the road was thereafter dependent upon the counties through which it passed.

After 1849-50 Road left to Control of Counties.

The report[52] of the board for 1850–1851 gives the condition of the road in that year:

Condition of Road given in Report of Board for 1850-1851.

"The road extending from Owingsville to the mouth of Sandy is seventy-eight miles long, and is a dirt road—

ervation; that the investment must be regarded as a "dead loss" to the State at large, but of some value to the worthy and respectable population who used it most and who no doubt would take care of it when abandoned by the State. (Legislative Documents, 1847–1848, p. 599.)

By an act of February 10, 1848, sections of the road were merged with the county road of Carter County and the old sections abandoned by the State.

fifteen or twenty miles not graded. Its condition has long been such that no tolls are demanded, and little or no work has been done on it by way of repairs. It is in a state of decay and dilapidation. . . . There are some fifteen or twenty miles of this road in Greenup County upon which there is much travel,[a] but mostly for local

Road of Local Importance only.

[a] The road in Virginia from the mouth of the Big Sandy to the falls of the Kanawha was the old Indian trail (see p. 70) improved. "At an early day the road in Teays' Valley was called the 'State road,' and was the great thoroughfare from Greenbrier County to the Ohio River. It was largely used by the Kentucky hog-drivers in getting their stock to the Richmond market. Farmers raised nothing but corn, for which they always found a ready home market from these hog-drivers. They were so anxious to procure 'ready cash' that they would sell the corn to the drovers in the fall at 12½ @ 15 cents per bushel, and would have to pay 35 @ 40 cents per bushel in the spring. The result of this kind of management was that the farmers were kept poor and the land was worn out in a few years from using it for the cultivation of corn alone. The land became so barren that the John Hubbard farm . . . was called 'Pea Ridge' because it was considered too poor to raise black-eyed peas. After steamboats had begun to run on the Ohio River the Kentucky stock-producers shipped their stock to Pittsburgh and Cincinnati, and this relieved the Teays Valley farmers from this temptation to wear out the land in raising corn." As early as 1810 mail was carried to the mouth of the Big Sandy (Catlettsburg) on the main New-Kanawha road and the Teays' Valley extension. (Recollections of Captain John Boyer, George W. Atkinson, History of Kanawha County, pp. 193–194.)

This road, like the Wilderness Road, probably attained its maximum of importance as a transmontane route between 1830 and 1840. January 28, 1833, the following resolutions were sent from the Kentucky Legislature to Congress: "Whereas, it is the opinion of this General Assembly that the road from Lexington . . . through Winchester, Mt. Sterling, and Owingsville, to the mouth of the Big Sandy, is the nearest route to the city of Washington, upon which a triweekly line of stages has been established; and whereas, it is the great thoroughfare through which Kentucky supplies her sister States in the East with her livestock and produce necessary to their subsistence; and whereas, a considerable portion of said road passes through a section of this State sparse in population and limited in resources; Therefore, (1) Be it resolved by the General Assembly . . . that said road is of high national importance and demands the liberal consideration of the general Government. (2) Be it resolved, that our Senators in Congress be instructed, and our representatives requested, to use their utmost exertions to procure an appropriation in money sufficient to make the necessary improvements on said road."

Even at this time, however, when commerce on the road had reached its height, the revenue from the tolls was not enough to pay expenses. During 1836–7 there passed through the gate:

and not general purposes. This part could have been leased for a term of years merely for the purpose of repair, producing no rent."[a]

Tributaries

Tributaries of the Big Sandy Road Improved.

The principal tributaries of the Big Sandy road to be improved were those leading from the salt-works in the upper Little Sandy Valley, in the vicinity of Grayson.

Roads to Salt-works.

The opening of a road from Prestonburg, Floyd County, to these works, passing through Paintsville and "Sweat-

Horsemen	1,118
Persons afoot	592
Drove horses	696
Wagons and carriages, four wheels	334
Carriages or carts with two wheels	15
Head of cattle	198
Hogs	18,378
Total revenue	$493.93

The gate-keeper received for his services $100. Including this, there was a total of $617.07 expended on the road, which meant that the keeper was overdrawn $123.04. This was a typical deficit. (House Journal, 1836–7, p. 447; Report of Commissioners.)

[a] North of this route a number of other roads led from Central Kentucky to the mouth of the Big Sandy, but they were at a disadvantage in that they could not furnish a sufficient food supply, and they received but little State aid. Chief of these roads were—one from Paris via the mouth of Fleming Creek and the "Ohio salt licks," concerning which there was legislation as early as 1808 (February 6th); and one extending from Washington in Mason County. It was in the latter road that the board, in 1837–8, recommended a change to be made that it might run along the fertile Ohio River district from Greenupsburg to Kinnikonick Creek, since the sterile soil of the country through which it then passed did not, except at one point (the crossing of Tygert Creek), afford sufficient grain for the "stock and travel," although the travel consisted only of "stock-drivers" from the counties of Bourbon, etc., in the fall, and a few citizens of Eastern Kentucky, and of Virginia removing by wagon to the west, and an occasional horseman. (Senate Journal, 1837–8, Appendix, p. 160; Report of the Board of Internal Improvement.)

A route from Poplar Plains, Fleming County, to Louisa, was surveyed by the board at a cost of $576.23. (See Acts, February 29, 1836.)

man's," was provided for by the act of January 22, 1830. In February, 1834, the issue of $1,000 in land warrants was authorized for the completion of the road.[a] The same act authorized also the issue of $300 in land warrants for the improvement of a road from West Liberty to the salt-works "down Bruen Creek."

Mt. Sterling–Pound Gap Road

Mt. Sterling-Pound Gap Route Third of the Main Lines to be Improved.

A route from the Licking Valley to Pound Gap was the third of the main lines to be improved.

Survey Authorized February, 1817.

An act[53] of February 4, 1817, named three commissioners, whom it directed to "view, survey and mark a road lying on the nearest and best way practicable from the town of Mountsterling in Montgomery county, to the town of Prestonburg, in the county of Floyd; and from thence to the State line on top of the Cumberland Mountain,[b] so as to unite with a road established by the State of Virginia, or by the county court of Russell County to said State line." The commissioners, entitled to the sum of two dollars per day for their services, were to employ

[a] In compliance with an act approved January 7, 1839, the board expended $792.34 for a survey of a route from Greenupsburg via Carter County Court House (Grayson) to Floyd County Court House (Prestonburg). No improvement was made, however. (Legislative Documents, 1851–1852, p. 760.) There was a road from Prestonburg to the salt-works as early as 1815, and probably established before that date. (See Littell's Laws, Vol. V, p. 155.)

[b] Pine Mountain, from the Breaks of Sandy to Pound Gap (also known as Sounding Gap), has often been confused with Cumberland Mountain, although the two ridges are distinct throughout their length, both from a geological and topographical standpoint. (See pp. 9, 10, 57.)

"a competent surveyor" at three dollars, and "necessary chain-carriers" at one dollar each per day. They were to be paid from the State treasury, and were to take an oath that they would faithfully perform the duties assigned them. It was further enacted that the county courts of the different counties through which said road might pass should proceed to appoint supervisors of said road in every part thereof, which passed through their respective counties, and "through an inhabited territory possessing hands sufficient in their opinion to open said road; and also allot the hands and direct said road forthwith to be opened in the parts aforesaid," if the report of said viewers should be "favorable."[a]

Commissioners estimated Cost of Proposed Improvement at $5,000.

In the same year the commissioners[54] reported, as "surveyed and marked," a route of 125.5 miles: commencing at Mt. Sterling court house and "measured by the road as already sufficiently opened from said court house to Philip Haman's," a distance of $7\frac{1}{2}$ miles; thence to the town of Prestonburg in Floyd County ($71\frac{1}{2}$ miles); from there to the top of Cumberland Mountain (i. e., Pine Mountain) in a direction to Russell Court House in the

[a] The act directed the county courts of Floyd and Montgomery, upon a favorable report from the commissioners, each to appoint "two fit persons at their own county towns, and two more in any other convenient and proper place, for the purpose of opening subscriptions for stock." Any number of shares might be subscribed at $100 a share, payable in six equal installments every two successive months, "commencing after the time a company may be incorporated." The persons so appointed were to report to the next Legislature the number of shares subscribed, in order that the Legislature might be enabled "to determine on the expediency of incorporating a company for erecting a turnpike on said road." (Littell, Vol. V, p. 555.)

State of Virginia (46½ miles). It was estimated that the "probable" cost of opening the road would not exceed $5,000, and the opening was urged, since the road was "entirely practicable," could easily be made passable for wagons and carriages, and would be of great benefit and public utility. The "conveniences" would be "various and many" as respected "travellers and the carrying business," and "in proportion to the increase of population and emigration to the western parts of our country" the advantages of the road would be increased, as it was "actually the most direct way from the interior of Virginia to and from the interior of Kentucky," and would prove, in the opinion of the commissioners, "a more eligible way to travel, when opened, than either the old Wilderness Trace or the road commonly called the Greenbriar road."

Road would be of "Great Public Utility."

A more Direct Route to Seaboard than Wilderness or Greenbrier Roads.

The report stated, however, that the "bearing" of the route as surveyed was "too much southerly" after leaving Prestonburg, and from the best information available it was thought that a road opened up the Louisa Fork of the Big Sandy would be forty miles "nigher to the interior of Virginia or the Federal City." Therefore the commissioners recommended that the contemplated improvements should be suspended from Prestonburg to "the top of Cumberland"; also, "if it should be deemed advisable," that the Legislature of Virginia be addressed on the subject of opening that part of the road on the Louisa Fork that lay within the limits of that State, so that the two roads

But Pound Gap too "southerly"; Louisa Fork route recommended.

might "meet at the State line in a direction to Tazewell Court House."

1820, Virginia asked to Extend Road to State Line.

The act of December 21, 1820, appropriated $1,500 for a survey of this road; and on February 12, 1820,[55] the Virginia Legislature provided for the appointment of a commission to act in conjunction with State commissioners from Kentucky in deciding where a road, from Mt. Sterling via Prestonburg in the direction of Tazewell Court House, should cross the dividing line between the States, to intersect "the main western road leading from Richmond by Abingdon at the most convenient point."[a]

Commissioners of the Two States to Act Together.

Report of Commissioners.

The commissioners reported,[56] November 22, 1823, that they had selected as most practicable the route from a point marked V. K. on the Louisa Fork up the river to Clinch Mountain. They recommended that the new road should be at least thirty feet wide, cleared of all obstructions, and made passable for wagons and other carriages.

January, 1824, State appropriated $2,700 to the Road.

January 7, 1824, there was appropriated from the Kentucky State treasury $2,700 to the road from "Mount Sterling to the Virginia line," and the erection of one or more turnpikes was authorized.[b] An act of November 30, 1824, directed the commissioners to examine sections of the road, when finished, for the purpose of ascertaining if it were "cut out, dug, and improved, agreeably to

Turnpikes Authorized.

[a] This action was in accordance with a former Virginia law which provided for the opening of a road from the line dividing the two States, or the Louisa Fork of the Sandy, to the "rich lands" of Clinch River. (House Journal, 1823, p. 155.)

[b] The undertakers were required to "board and victual" road hands. (Acts.)

the conditions" of the undertakers' bond. They were to examine, "especially on hillsides and other places," whether the road was durable and would not "slide off or otherwise fall," and particularly whether the bridges required to be built would be of good material, etc. If the conditions had not been satisfactorily complied with the commissioners were authorized to institute suits against the undertakers, or else to extend their time, withholding payment until the road was properly completed. An act of January 29, 1829, provided for the completion of the road from Prestonburg to the Virginia line.[a]

Unsuccessful Attempts to Obtain Subscription for a Stock Company.

Efforts were made at various times to determine if the people would subscribe sufficient stock, at $100 a share, to warrant the incorporation of a turnpike company. Since subscriptions were not forthcoming, the only further work accomplished on the road was between 1836 and 1845, under the Board of Internal Improvement, when $23,243.40 was expended.[57]

1836-1845, Further Work under the Board, at cost of $23,243.

Survey of Road by the Board.

The work was begun in 1836 by a survey of the section from Mt. Sterling to the crossing of Louisa Fork, five miles southeast of Prestonburg, a distance of ninety-four miles; and a reconnoissance from the crossing to Pikeville, twenty miles farther, and from that point to the Virginia line, twenty-four miles distant. This was undertaken that it might be discovered whether or not it would be for the "public utility" to expend the "whole, or part," of the

[a] An act of January 15, 1831, appropriated $500 in land warrants for repairs on the section between Slate and Blackwater creeks. (Acts.)

$15,000 appropriated[a] at the preceding session of the Legislature for "amending, altering, or reconstructing all or any part of said road."

Report of Board recommending Improvements.

The board recommended in its report that the improvements be made. "The road . . . has its commencement in the heart of Montgomery County, touches Bath, and passes through the counties of Morgan, Floyd, and Pike. It is greatly used for the driving of stock (hogs, horses, and cattle) to the Virginia and Southern markets, and is about one hundred and forty miles shorter from Lexington in Kentucky to Petersburg in Virginia than the road between the same points which passes the Crab Orchard and Cumberland Gap, and is about forty miles shorter than the road by the mouth of the Sandy. The population on the road is sparse, but more than sufficient to afford every accommodation that might be required for the stock-drovers; and that it is not in a better state of cultivation has been owing to obstacles presented by the high hills to the formation of good roads."

Road of Great Utility to Stock-drovers.

[a] The act of February 11, 1836, granting the appropriation, recited that it had been represented to the General Assembly that the road was of great importance, not only to the citizens of the State who lived in its vicinity, but to those engaged in the raising of stock and in the driving of same to Virginia and the two Carolinas; that it was much traveled by large droves of stock, though it was badly located and indifferently constructed; that the greater portion of the State through which it passed was sparsely populated and did not furnish materials for a " M'Adamized" road. When the improvements were completed the county court was not to change the road. Tollgates—not more than three—were authorized, and the tolls were fixed. There seem to have been no gates on the road throughout this period, although authorized in a number of acts.

The board recommended further that the sum of $13,626.37 be expended on the road at certain points, where the "contracts" could be carried out in the "present season" by the labor of the country. Such improvements "would enable a six-horse wagon to haul three thousand pounds from Mount Sterling to Prestonburg, at the rate of twenty miles per day, and would be of the greatest service to a valuable but almost inaccessible portion of the State."[58]

On Improved Road haulage possible of 3,000 pounds by Six-horse Wagon, twenty miles per day.

The act of February 23, 1837, appropriated, out of the proceeds of the sale of Internal Improvement scrip, $10,000 additional for "altering and amending" the road according to the recommendations of the board. The improvements were made entirely at State expense. A report[59] of the board, December 31, 1839, when the work was practically completed, showed that this road from Mt. Sterling to the Virginia line, 138 miles long, had been improved by "grading and draining the worst hills, and bridging some of the worst water-courses."[a] It was thereby rendered of "great

1839, the Improvements practically Completed.

[a] Among the improvements made were the reduction of grades, exceeding five degrees to the slope, over Dry Ridge; the avoidance of six unnecessary crossings of Johnson's Fork, and two of the Licking at Licking Station; the erection of six bridges after the first crossing of the Big Sandy, near Pikeville. (Kentucky Acts, February 23, 1837; House Journal, 1837–1838, Appendix, pp. 170–174.) "The bridges . . . have been constructed so as to be covered with water during the highest floods. They are built with stone abutments as required by law. The superstructures are secured to the abutments by iron fastenings in such manner as to prevent them from being lifted off by the water or otherwise disturbed." (House Journal, 1838–9, Appendix, p. 97; Report of the Chief Engineer, dated 1838.)

The following substance of a report of the survey made by the board gives the line and condition of the road before it was improved: The road from Mt. Sterling to Slate Creek, nine miles through rich rolling country, in direct line conforms to the surface. It is frequently steep and there are a number of fence-

use to the citizens of this section" of the State, who were "enabled to haul moderate-sized loads over the whole distance" and to drive stock to the Eastern markets, where "their surplus produce" was "required at a fine market price."

Extension to Pound Gap Improved.

In the meantime, projects had been formed to improve the route as originally planned, from Pikeville to Pound Gap,

rail causeways. The substratum is limestone, and like richer parts of the State the soil is not well adapted to the formation of good earthen roads. After crossing Slate Creek the geological character of the country is entirely different. It contains no other rocks than sandstone and slate, and the soil is of the best character for the formation of natural roads. The expenditure justified, Slate Creek would require a bridge, as in the spring season it is frequently too deep and has too swift a current to be fordable; but as the duration of freshets is short, and the road but little traveled at that season, one is not recommended. From Slate Creek the road passes up that valley to its head, where it is separated from the waters of Beaver Creek, another one of the tributaries of the Licking River, by Slate Hill, which is 200 feet high and 1,112 yards across. The road over this hill was exceedingly steep and irregular, conforming to the natural surface except in a few points where it had been excavated for the width of twelve feet. This hill and the others that will be described, similar to it, were the great barriers to the intercourse of the citizens along the road; but few wagons ventured to encounter it, and most of those had ox teams. Slate Hill is eighteen miles west of Mt. Sterling, and where the road crosses is in the lower edge of Bath County. The road from the eastern side of Slate Hill descends the valley of Beaver Creek for about three miles, when it ascends very abruptly Beaver Hill, which is a part of the high ridge that separates the waters of the Red River from those of the Licking. The ascent of Beaver Hill was the steepest of the road and in the worst condition of any part of the whole road, with the exception of Abbot Mountain, which will be described. The height was 270 feet, and the road led to a much higher point than was necessary. Beaver Hill is twenty-two miles east of Mt. Sterling, and its summit is the commencement of the Dry Ridge upon which the road continues for fifteen miles, over a very rugged succession of hills, until it descends into the valley of Red River, up which it passes to its head, encountering but two obstructions, the Meeting House and the Black Bone Hills, which are of but little height. The valley of Red River affords a very good locality for a road—the stream has to be frequently crossed, but so nearly to its source that it is but small. It is separated from Johnson's Fork of the Licking by the Red River Hill, which is 265 feet high on its east side. The road over this hill has been made like those described—the hill has on its sides flat benches wide enough to receive the road, and the ascent from one to the other was made at angles of about eleven degrees, and where there were side cuttings the road was

since this had become of more importance than the Louisa Fork extension, on account of local commerce with the adjoining regions to the southeast in Virginia and Tennessee.

1834, Turnpike Company Authorized but not Formed.

February 8, 1834, an act was passed to establish the Pikeville and Virginia Turnpike Company,[a] which was to control the road from Pikeville to the Virginia line, at or near the head of the Elkhorn. It was to be incorporated

only about twelve feet wide. Red River Hill is in Morgan County and is fifty-one miles east of Mt. Sterling. The road then descends the valley of Johnson's Fork for seven miles, crossing it frequently, and seven times after the accession of its tributaries have swelled it to a considerable creek. Six of these crossings could be easily avoided, but it would require some side cuttings in the hills of slate and solid rock. The road then ascends the valley of one of the smaller tributaries, that flows from a ravine in the Middle Fork Hill, which separates it from the Middle Fork of the Licking River, the road over which is in every respect similar to the one described over Red River Hill. Middle Fork Hill is 220 feet high, is in Morgan County, and is sixty miles southeast of Mt. Sterling. The road then ascends the Middle Fork about four miles and passes over a low gap between the high hills which separate it from the main branch of the Licking River. It crosses the river three times within one mile, on either side of the old Licking Station, and passes up the valley of the Burning Fork, by the celebrated Burning Spring and through a very low gap which separates it from Middle Creek, one of the tributaries of the Sandy River, down which it continues until it becomes necessary to cross Abbot Mountain in order to descend to Sandy River, which it does in the valley of Abbot Creek. Abbot Mountain is in Floyd County and is eighty miles southeast of Mt. Sterling. It is 320 feet high on the east side, and over it the road is steeper, rougher, and more difficult to pass than at any other point. The east side is the steepest, and few wagons venture to pass it. The road crosses the Sandy River at a ferry, nearly two miles below Prestonburg, and above the town again crosses the river, passing across a promontory formed by a great bend in the river of about twelve miles in length, and after passing the Town Hill and Morgan's Mountain (the latter is 230 feet high) it again crosses the Sandy River at a point five miles from Prestonburg. It then passes up the valley of the Sandy River to Pikeville, and is made to cross the river at three other points, all of which might be easily avoided. The road continues up the same valley to the Virginia line, and only encounters one hill, called the Card Ridge, three miles from the State line. (House Journal, 1836–7, p. 121–122; Survey, May 1, 1836.)

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[a] The stock was not to be sold for less than par, and the holders might receive annual dividends of not more than six per cent. The State reserved the right to take over the capital stock at any time after twenty years, upon payment

with a capital stock of $25,000, divided into shares of fifty dollars each. Books for the subscription of stock were to be opened on the first Monday in June following the passage of the act, at Pikeville and Prestonburg in Kentucky and at the court houses of Lee and Scott counties in Virginia. This was to be done under the direction of two Kentucky commissioners, selected by the act, who were in their turn to appoint commissioners in Virginia.

Extension improved by Board with expenditure of $6,324.

The provisions of the act were not executed, however, and the proposed improvements were made later, under the board, with $6,324 from the State funds. In the year 1835–1836 the route from Pikeville, by way of the Shelby and Elkhorn creeks to "Sounding Gap" (Pound Gap), was reconnoitered along a line "distinctly marked by

to the holders of the price of investment. Provision was made for a board of managers, which was to appoint surveyors and engineers "to mark the nearest practicable route," the county courts rendering judgment for damages to owners or tenants occupying the land. It was directed that the road be cut at least thirty feet wide and be dug and made smooth twenty feet wide, when digging should be "necessary." At all times it was to be kept in repair, suitable for carriages and "other travelling." One tollgate was authorized, to be located a mile from the Virginia line, the keeper to receive a salary of not more than $100 a year. If he should permit a part of the road to get out of repair, that part was to be examined by any two justices of the peace residing in Pike County, and if the bad condition had existed for ten days the gate was to be opened and tolls suspended until the repairs were made. The toll rates were fixed:

One hundred head of hogs, sheep, or other small stock	$0.50
Each head of cattle	.01
" horse, mule, or ass, or other large animal except cattle	.06¼
" foot passenger	.06¼
" two-wheeled carriage, horse or horses and driver	.25
" four-wheeled carriage, etc	.50

(Kentucky Acts.)

nature." The board reported: "To construct a road through this section of the State, which would be sufficient for the driving of stock at all seasons and for the passage of wagons in the summer and autumn, when the waters of the creeks, which have to be frequently crossed, are not swollen, would be of great benefit to the community and could be made at comparatively small cost." This cost was estimated at $8,000.

The Improvement Urged because of Navigation on the Big Sandy.

At this time navigation on the Big Sandy began to assume importance, and the fact was an additional reason for the improvement of the road. The report of the board continued: "It is proposed by this road to open a communication between a point on the West Fork of the Sandy (Louisa Fork), up to which it is navigable for a large portion of the year, with a road leading from the eastern counties in Tennessee through the southwestern part of Virginia. It is also thought that, as there is a road now being constructed through Russell County in Virginia, which is intended to connect the Sounding Gap with roads leading to Abingdon and East Tennessee, the merchandise which is brought from the Atlantic cities to that section of the country could be most advantageously imported to them by way of the Ohio River, the Sandy River, and the proposed road."[60]

When the improvements were begun, the following year, the estimate of cost was slightly increased for certain points where the work required was, in the opinion of the

board,[61] "of so heavy a kind" that if it should not be accomplished by the State there was "no reasonable probability that the inhabitants of that section would be able to make a wagon road between the extreme points, and the road, in connection with the navigation of the Sandy, was of sufficient public importance for the expenditure of the whole appropriation"—that is, $8,000, authorized February 20, 1836.

1838, Improvements practically Completed; Report of the Board.

After an expenditure of $6,114.69 the improvements were practically completed, and described in a report[62] of the board (1838): "The distance from Pikeville to Sounding Gap, according to the survey,[a] is thirty-seven miles. The part of the road from Pikeville to the top of Island Hill, about seven miles, has been made during the present year by Thomas May. The contract price was $3,000. The work is finished and paid for. The other side of this hill was improved in 1836. Wagons can pass conveniently over this road as far as it is graded. The balance is a good road for driving stock upon, as far as the Virginia line."

1838, Mt. Sterling-Pound Gap Road given over to Care of Counties.

From this time the Mt. Sterling-Pound Gap road, as it was called, was given over to the care of the counties

[a] The route surveyed, practically the old Indian trail up Shelby Creek, extended "along the margin of the Sandy" to the mouth of Island Creek; up Island Creek to Shelby Creek; up Shelby to the mouth of Robertson's Creek; up Robertson's and down Long Fork to Shelby; up Shelby to Elkhorn; up Elkhorn to the "foot of Cumberland Mountain" (i. e., Pine Mountain); and up this mountain to the Virginia line in Sounding Gap, by means of a gap between Elkhorn and the Kentucky River, elevated about one-half the height of the former gap. This route, via the Kentucky-Elkhorn gap, was longer but less steep than a line straight up Elkhorn, and had the further advantage of connecting at the gap with a road from Hazard, in Perry County, which had become a mail route. (House Journal, 1835–6, Appendix, pp. 46–47.)

through which it passed. It began to be neglected as early as 1839. Practically no attention was paid to its preservation, and parts of it were "so cut up by water that it was difficult for wagons to pass."[63] Nevertheless local travel and commerce increased annually up to the Civil War, and Pound Gap, which until that time was the point of intersection of numerous roads both from Kentucky and Virginia, became a noted commercial center in that part of the State.[a]

Important for Local Commerce to time of Civil War.

Tributaries

An Important Tributary from Iron Works in Menefee County improved.

The most important tributary of this road to be improved by the State extended from the iron-works on Beaver Creek (tributary of the Licking) by way of West Liberty to Prestonburg. By an act of December 2, 1822, a lottery was authorized to raise funds for the opening of a road "from Beaver iron works, Bath County (now Menefee), to Prestonburg." The act was several times amended. In 1823 the appropriation was limited to $3,000. January 24, 1827, provision was made for opening a branch of the tributary from West Liberty to Louisa, in Lawrence

[a] Traffic through Pound Gap reached from Saltville, Virginia, to the iron-works in Bath County and on the Red River, in Kentucky. Salt was hauled in wagons from the salt-works in Washington County, Virginia, to supply much of the demand in the counties of Pike, Letcher, Floyd, and Perry, and iron was taken back from the iron-works in Kentucky and distributed as "the great, huge teams" returned to Virginia. Judge Osburn's hotel, at the foot of Pound Gap on Elkhorn, was one of the most important on the entire route. In addition to the calling of innkeeper he kept on sale salt, iron, and other articles of merchandise for the convenience of his neighbors. "This point was a busy place until the traffic which kept it up was turned into other channels and other directions." (William Ely, The Big Sandy Valley, p. 415.)

County. The act of January 15, 1831, appropriated $500 in land warrants for the completion of the improvements.[a]

Other Tributaries.

All appropriations made by the State to other tributaries were insignificant.[b] Thus, on February 24, 1834, a grant of $300 was made to Lawrence County to aid the court in the erection of three bridges on the mail route from Catlettsburg, at the mouth of the Big Sandy, to Pikeville.

Irvine-Pound Gap Road

Kentucky River Route to Pound Gap last of Four Main Lines to be improved.

The route up the Kentucky River valley, extending from Irvine in Estill County to Pound Gap, although an established line at an early day, was the last of the four main roads to receive attention from the State. Moreover, the appropriations when made were small, and the road was but slightly improved.

January 15, 1831, the court of Perry County was authorized to sell the "Seminary Lands"[c] of the county

[a] From the iron-works the road extended via Olympian Springs to Mt. Sterling, probably along the old Big Sandy route. (See Colton's Map of Kentucky, 1856.) By act of December 22, 1831, $400 in land warrants was appropriated to the road from West Liberty to Mt. Sterling via the Beaver iron-works. These works were short-lived, but the road and its branch became an important line of travel. One of the principal points on the Louisa extension was the "Sweatnum neighborhood" in the Blaine Creek valley. Here, in 1818, Neri Sweatnum and family, from Virginia, bought a large piece of land, and his home, according to Ely, "was the stopping place for most of the lawyers and statesmen who so frequently, in an early day, passed by the Sweatnum neighborhood, on the road from Louisa to West Liberty, or from the interior of the State to the Sandy country." (Ely, Big Sandy Valley, p. 84.)

[b] December 22, 1831, $150 in land warrants was appropriated to a branch leading to the North Fork of the Kentucky, near the mouth of Holly Creek.

[c] A law had "provided, 'that all the lands lying within the bounds of this Commonwealth on the south side of Cumberland River, and below Obed's River, now vacant, etc., shall be reserved for the endowment and use of seminaries of

1831, Road from Estill County, via Hazard to Virginia, to be opened.

which had not been sold, and apply the proceeds to opening a road from the Estill County line via Perry Court House (Hazard) to the Virginia line. Ten thousand acres in land warrants, to be located in the county, were also appropriated to the same object. The upper section, from "the mouth of Troublesome to Sounding Gap," became a mail route, and in the year 1836-1837 was examined by the Board of Internal Improvement in accordance with an act of the preceding year, which made a conditional grant of $3,000 for improvements.[a] The chief engineer reported:[64]

1836-1837, Route Examined by the Board.

Report of the Board, recommending improvements.

"The nearest practicable route . . . would require a road of eighty miles in length. . . . The road would be of great public utility if it could be extended to Irvine in Estill County and thus communicate with all parts of the State. At the present time a very large section of country in the southeastern part of the State has no better

learning throughout the Commonwealth.' The county courts of the several counties were authorized to have surveyed, located, and patented within their respective counties, or within the above reserve, or elsewhere in the State, 6,000 acres each, for seminary purposes, and all such lands were exempted from taxation. . . . But by . . . unwise acts the lands were allowed to be sold by county authorities, and the proceeds . . . were . . . expended and squandered in every conceivable way. In some counties these proceeds are altogether lost to view; in others the remains are lodged in the hands of the trustees appointed, . . . in others . . . these remains of funds or lands are yet held for their original uses by the trustees." (Collins, Vol. I, p. 503.)

[a] The act of February 25, 1836, recited that it had been represented that such a road would greatly promote the intercourse between the two States and essentially conduce to the convenience and benefit of the population of the country through which it might pass. When opened, it was to be placed in charge of the court of Perry County, and to be on the same "footing" as other county roads as to working and repair, but the court was to have no power to alter or discontinue the road.

means of communication with the interior than bridle paths, and all the merchandise consumed in it is transported on pack-horses. The appropriation is so totally inadequate to the construction of the road that I feel at a loss how to recommend the expenditure of any part . . . ; but if the Board should direct the road from Pikeville to be made to the Sounding Gap, it would certainly be of great advantage to the community in that section to have this road to connect with that on the side of the mountain, at a point about one mile below the gap. This would make the road up the mountain answer a double purpose. I, therefore, recommend that two miles and a quarter of this road should be made from the point of intersection."

Bridle Paths the only roads in that section of the State

Further improvements were recommended from this intersection with the Pikeville road down the North Fork and across numerous divides to the mouth of Troublesome Creek,[a] along which "no peculiar difficulties would be encountered." The necessary expenses were estimated at about $200 per mile for the greater part of the course, which passed through the valleys of the streams, and $2,000 per mile for some eight miles where side cuttings

Cost would average $200 per mile.

In places $2,000 per mile required.

[a] The line recommended was to descend the North Fork of the Kentucky to the mouth of Millstone Creek, which it should ascend and pass over the ridge which divides it from Thornton Creek; up Thornton Creek and through a low gap which divides it from Rockhouse Fork; up Rockhouse Fork for one mile, and up one of the tributaries, which leads over a ridge, which divides it from Carr's Fork; down Carr's Fork to its mouth, and down the North Fork of the Kentucky, through Hazard, to the mouth of Lott's Creek; up Lott's Creek and over a ridge which divides it from Lost Creek; down Lost Creek to Troublesome, and down Troublesome to its mouth. (House Journal, 1836–7, Appendix, p. 127.)

were required. The maximum elevation necessary was one foot in every sixteen feet. By an act of February 23, 1837, the section was granted $7,000 in "scrip," with the provisions that the grade on the road was to be not over five degrees and the width of the road over dividing ridges not less than fifteen feet. Tollgates were authorized to be established.

An act of February 6, 1839, authorized a survey of the road from Irvine to the mouth of Troublesome, to determine whether a provisional appropriation of $10,000 should be expended for improvements.[65] After an examination of the road the board reported[66] that the total cost of the needed improvements would amount to $35,770; that the route, which followed an old road extending up the main valley[a] and across the river hills as far as the Middle Fork, thence passing by way of the southern tributaries of the North Fork to Troublesome Creek, compared favorably with any other examined; that, as a rule, the

1839-40, an Expenditure of $35,770 recommended on an existing "Horse Path" between Irvine and Troublesome Creek.

[a] The route as surveyed extended along the valley of the Kentucky for about nine miles, then ascending the river cliffs, over uneven and broken country, to the mouth of Middle Fork, a distance of 17.5 miles, ran parallel with the fork for 9.5 miles to a point near the mouth of upper Twin Creek; passed up the creek to the gap dividing it from Cane Creek, 5.5 miles, and down stream to East Fork of Cane, four miles, and along this to its source, 6.25 miles; thence down a rocky gap to North Fork, which it descended and crossed, passing through a low depression in the hills to the mouth of Troublesome. Some of the hills on the old road were from two hundred to five hundred feet high, and were crossed at grades of from five to twenty-four degrees. The new route led around these, and was therefore longer. An alternative, and shorter, route led via Contrary Creek and South Fork to Middle Fork, which could probably be used to great advantage during the construction of locks on the Kentucky River, and which gave access to the coal mines at South Fork, then "opened and wrought." (Senate Journal, 1839–1840, Appendix, pp. 285–287.)

grades would not exceed five degrees, although they would reach ten in places on account of the narrow gaps through which the road must pass; that the width would be eighteen feet on level ground and sixteen feet on the hillsides; that as the appropriation was inadequate for the entire line, it was recommended the improvements be made on the lower section, immediately above Irvine, from which point there would be a wagon road connection with Central Kentucky. The report described the country thus:

Reason for Recommendation.

"Along the greater portion of the road the population is sparse, and the settlements are with but few exceptions in the valleys of the creeks and rivers. Those valleys or bottoms are narrow, and the greatest available extent being applied to the purposes of cultivation, the present travelled horse-path is not upon the best ground, but forced out upon the hillside. At present, persons who live on the upper part of the line[a] have no other means of communication with the populous districts of country than bridle-paths, or the river, and all merchandise consumed is transported on pack-horses, or conveyed in canoes up the river."

[a] Mather, in his Geological Report of January 3, 1839, describes the country along North Fork, in the vicinity of Troublesome: "The country is but thinly settled, as there is little land adapted to tillage, and it is considered impassable for wagons. Bridle-paths are the only roads, and there is no means of transporting any of the produce of the country to a market except by flat-boats at high water, or on pack-horses." From the mouth of Frozen Creek northward to Hazel Green, afterward the line of an important tributary, the country, according to the report, was likewise "almost entirely in a state of nature, and impassable except on foot or on horseback." (House Journal, 1838–9, Appendix, pp. 252–253.)

Appropriations Insufficient.

By the close of 1839 the sum of $448.50 for the survey had been expended by the board on the part of the road between Irvine and the mouth of Troublesome Creek;[a] and $731.50, including $31.50 for the survey, from Troublesome on to Sounding Gap.[67] With such insufficient amounts little could be accomplished, and throughout the period the road remained a mere bridle-path. Commerce in its vicinity, as is indicated by the reports of the board, was carried on almost exclusively by means of the Kentucky River and its forks; the main stream was navigable for flat-boats as far as Hazard. Road traffic was practically limited to livestock from local farms on their way to Eastern markets.

Tributaries

Tributaries of the Road leading from Hazard improved, probably on account of the Salt-works on North Fork.

The tributaries of the road likewise received scant aid from the State. Such legislation as was enacted concerned, in general, only the tributaries of the upper section of the road extending from Hazard. Several of these, probably because of the salt-works on the North Fork and near Manchester, whither a branch led,[b] were granted small

[a] The chief engineer, January 6, 1840, reported that a survey had been made of the Irvine-Troublesome section and the improvements laid out, but as no funds had been provided to pay the expenses a superintendent, who was to have executed the work as agent of the State, had not been appointed and no improvements had been commenced. (House Journal, 1839–1840, Appendix, p. 224.)

[b] An act of January 28, 1817, refers to a road as crossing the dividing ridge between the South and Middle forks of the Kentucky River, which led from the "North Fork salt-works" to Manchester. (Littell's Acts, Vol. V, p. 472.)

An act of December 7, 1831, appropriated $200 in land warrants for a road from James White's salt furnace in Clay County to Hazard, which was to be ten feet wide and passable for wagons and carts. (Kentucky Acts.)

appropriations. The act of February 24, 1834, granted $500 in land warrants to the road from Perry County Court House (Hazard), extending in the direction of Floyd County Court House (Prestonburg). The same act gave over to the use of this road, also, the land warrants authorized by an act of February 2, 1833, to be expended on roads in Floyd County, but which were as yet "unappropriated." An act of February 24, 1834, granted $150, likewise in land warrants, for improving roads in Pike County, from Long Fork of Shelby's Creek toward Perry County Court House. Insignificant improvements, also, were made on a bridle-path leading across Pine Mountain via Hurricane Gap into Harlan County,[68] and on another[69] which extended from Hazard across the divides to the Middle Fork of the Kentucky and upstream to headwaters, crossing Pine Mountain at War Gap and reaching Harlan on the Cumberland River.

Aside from State Roads, highways but slightly improved.

Aside from the State roads, the highways of the mountains were merely the old forest trails, some of them a little improved. In some cases the improvements were probably due to private enterprise and unaided by legislation of any kind. There were, for example, by 1837, in the Hanging Rock iron district, a number of roads, from two to fifteen miles in length, which had been built by the owners of the furnaces to connect with the Little Sandy River, down which the iron was shipped.

Just when the counties began the work of road-building can not be determined from the data at hand. It is possible, though quite unlikely, that records of improvements on roads might be found in the annals of the original Virginia counties when Kentucky was a part of that State.

Policy of the State to surrender care of Established Roads to County.

As has been shown, it was the policy of the Kentucky Legislature to open the roads and then give over their maintenance to the county courts. Toward the close of the period the authority of these courts became more distinctly recognized, and much of the legislation placed the administration of minor appropriations entirely within their jurisdiction.[a] Until 1850, however, the immense areas of unoccupied and undeveloped land included within the county unit necessarily rendered of little consequence the improvements which the counties undertook.

Before 1830 no great contrast between Mountain Roads and those in Central Kentucky.

For a time, until 1830, the mountain roads, although steeper and more subject to frequent wash-outs, were not much inferior to those in Central Kentucky, where dirt roads also prevailed. Indeed, in some cases they were rather better, for the waste from the coal-measures, when composed of sandstone and slate, was superior to the miry clays of the lowlands for road purposes.

[a] February 2, 1833, the Land Office was directed to issue to the county court of Floyd $800 in land warrants, of 100 acres each, and located in the county, for the improvement of its public roads. In the same manner $500 was granted Perry County and $400 to Pike. Morgan County was granted $600 for a bridge over the Licking near West Liberty, in addition to a sum to be "levied" by the county and raised by private subscription. (Kentucky Acts; see also act February 9, 1836.)

Between 1830 and 1850 Contrast Marked.

This comparative equality[a] did not continue through the period, however. Between 1830 and 1850, by means of State aid, there was put into successful operation in Central Kentucky a turnpike system whereby macadam roads were constructed. There, where the population and wealth of the State centered, the joint stock companies flourished, and State appropriations were supplemented by large donations from individuals and from the minor civil divisions, which continued the work when it was abandoned by the State. By the close of the period this section was traversed by a magnificent system of highways, which as feeders to the Ohio River traffic became great arteries of trade, and their tollgates were a source of profit.[b]

Macadam Roads in Central Kentucky.

Between 1830 and 1850 the State invested $2,694,239 in the turnpike companies.[c] Of these, one, the "Owings-

[a] Overland travel in all parts of Kentucky, until after 1812, was almost entirely by horseback. From 1803 on, stages were run for short periods, between points within the State. (See p. 134, Note b.) The first regular line was not started until 1825, and it was not until the building of macadam roads that wheeled vehicles came into general use. (Johnston, Memorial History of Louisville, pp. 247, 319; Collins, Vol. I, p. 31.)

[b] These roads, graded 30–60 feet wide, with the macadam 16–20 feet and a dirt section for summer use, connected interior points with the Ohio. Some of them extended to the Tennessee line and connected with roads similarly improved in that State; for example, the road from Louisville via Bardstown, Glasgow, and Scottsville to the Tennessee border. The marked difference between the transportation facilities afforded by these roads and those improved in the mountains during the same period may be seen by a comparison of the possible tonnage. (For that of the mountain roads see pp. 123, 154.) In the Bluegrass on the macadam road between Lexington and Washington, August 11, 1834, a six-horse wagon drew three loads, averaging respectively 14,469, 15,724, and 14,529 pounds, a distance of ten miles each. (Collins, Vol. I, p. 39.)

[c] Individuals contributed $1,777,042. (Legislative Documents, Session 1851–1852; Report of Board of Internal Improvements, p. 762.) The disbursements made by the State to the main mountain roads were as follows:

1830-1850, State Expenditure on Mountain Roads comparatively Insignificant.

ville and Big Sandy," which received about six per cent of the amount, operated in the mountains. Exclusive of appropriations to that organization, a sum equal to but one and two-fifths per cent of the above was expended during that time upon the main mountain roads.

The contrast between the roads in the two sections of the State became steadily greater, and it was during this period that the rugged mountain region, left henceforth to shift for itself in the matter of highways, became isolated to such a marked degree.

Owingsville and Big Sandy, 1837–1847 . . .	$168,783.83
Mt. Sterling to Virginia line, 1836–1845 . . .	23,243.40
Pikeville and Sounding Gap, 1836–1847 . . .	6,324.00
Irvine to mouth of Troublesome, 1839 . . .	448.50
Mouth of Troublesome to Sounding Gap, 1836	731.50
Wilderness and Cumberland Gap, 1836–1843.	6,655.75

(*Ibid*, Session 1851–1852, p. 758; *Ibid*, 1847–1848, pp. 719–722.)

The State investments in the macadam roads paid dividends to the time of the tollgate raids (1896), when the investment amounted to $400,000 and the annual dividends to $24,000. At that time, however, the stock became worthless.

(Z. F. Smith, History of Kentucky, p. 844.)

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CHAPTER V

1850-1911—County Roads

When the State withdrew its aid from the mountain roads all public highways came under the control of the counties through which they passed. Since that time, with a few exceptions—short stretches improved by the Federal government or by private enterprise—old roads have been maintained and new ones established by the counties in accordance with the general road law.

Four State Roads continue to be the Master Routes.

The four main State roads and their chief tributaries, connecting as they do the various county court houses,[a] have been maintained, in general direction, in their integrity and even yet form the master routes.[b] But, except

[a] County seats have been located with a view to accessibility. In selecting one for Rockcastle, directions were given by the Legislature to pay "a just regard to the most central, convenient, and eligible spot in the county." (Littell's Laws, Vol. IV, p. 93.) The subdivision of counties has generally been for the sake of increasing the accessibility of the county seats. Knott County, formed for political reasons, was a notable exception. (See account of its formation in the Louisville Commercial, July 8, 1885, quoted in Perrin's History of Kentucky, p. 671; compare Littell, Laws, Vol. V, p. 162.)

[b] Colton's Map of Kentucky, 1856, is an excellent road map for the beginning of the period. Compare:

The Military Map of Kentucky and Tennessee, 1863 (inaccurate).
Map of Kentucky: Frontispiece in Shaler's History of Kentucky, 1884.
United States Post-Route Maps of Kentucky.
Mendenhall's Guide and Road Map.

No Longer Significant for Interstate Commerce.

for a short time during the Civil War,[a] they have not again been valuable as through routes. Traffic has continued across country, but it has been divided, at first by the transportation systems of Central Kentucky on the west, and by that of Virginia and West Virginia on the east, and since 1870-1890 by local railroads, which have been

Trend of Traffic Controlled by Railroads.

[a] During the war, after Kentucky had abandoned her position of neutrality, the roads were constantly used by the Confederate troops passing between their headquarters in Central and Eastern Tennessee and Central Kentucky. Upon them took place innumerable skirmishes and cross-road battles. Pound and Cumberland gaps, and many other less important passes through the eastern escarpment, were strategic points, held first by one army and then by the other. The Pound Gap routes and the Wilderness Road were the most used. On August 24, 1862, a military notice was served upon slaveholders in Fayette and Madison counties to furnish a specified number of able-bodied negro men "for the use of the United States Government as laborers" to repair the road between Mt. Vernon and Cumberland Gap. (Collins, Vol. I, p. 110.)

Even the old branch of the "Warrior's Path" leading north and south, from Pineville across the Ohio to the mouth of the Scioto, was used. (See p. 65, note.) Morgan, in command of the Federal troops at Cumberland Gap, was cut off from supplies by Kirby Smith, who with his men entered Kentucky through the Big Creek Gap, twenty miles southwest of Cumberland Gap. The pass had not been fortified by the Federals in their ignorance of the topography of the country. Fearing starvation, Morgan retreated to Cumberland Ford, where he took the old trail and its branches, marching through Manchester in Clay County, Proctor on the North Fork of the Kentucky in Owsley (now Lee) County, Campton and Hazel Green in Wolfe County, and Grayson in Carter County, to Greenupsburg, on the Ohio at the mouth of the Little Sandy. On this march of nearly two hundred miles, made between September 17th and October 3d, Morgan had with him practically all his field cannon. He was compelled occasionally "to create" his road, and the way was through "clouds of dust and over hot sands, with stagnant, tepid water for drink at times, and only roast corn for food." At the end the men resembled specters. They were shoeless, their clothing hung in tatters, and their bodies were wasted. The retreat is regarded by Shaler and Collins as one of the great exploits of the war. (Collins, Vol. I, p. 112; Shaler, History of Kentucky, p. 314.)

The small mountain farms afforded frugal provisions for an army, and by the close of the war had been denuded by passing soldiers of all supplies for man and beast. The devastation was increased later by bands of outlaws, guerillas and deserters, who from their mountain shelters pillaged, burned, and committed other outrages. (Collins, Vol. I, pp. 94–152.)

(From *The Outlook.*)

A MOUNTAIN ROAD WAGON.

slowly penetrating the region along the old transmontane lines.[a]

The old trails connecting with the four main routes were widened into wagon roads in accordance with the early specifications of the road law,[b] and have been established and maintained with the minimum of capital and labor which public opinion would tolerate. The county seats have become centers from which the thoroughfares

County Seats the Road Centers.

[a] The Owingsville-Big Sandy route has become a feeder to the Chesapeake & Ohio Railway, which runs parallel to it. The Wilderness Road is likewise a feeder to the Louisville & Nashville Railroad, which parallels it. There is now no interstate commerce on the Wilderness Road, although to the east of Cumberland Gap, the strategic point, there is a fertile agricultural district which is practically without a market, and on the west an active mining region with Middlesboro as a center, which might afford an excellent market because of the scarcity of farming land. On the Mt. Sterling-Prestonburg road, from Morgan County, merchandise has long been shipped from West Liberty to the railroads in Menefee County, while from Magoffin County the shipments have gone east to steamboat and railroad in the Big Sandy Valley. In the Kentucky Valley, from as far as Hazard, over the old road to the Bluegrass, stock is still driven and merchandise is taken by wagon from the railroad which runs parallel with the river as far as Jackson. But beyond Hazard commerce and travel go east to the railroads in Pike County and in the counties adjoining in Virginia and West Virginia. The coming of a railroad to a part of the region often immediately reverses the direction of the traffic. When the Lexington & Eastern to Hazard in Perry County is completed the principal exports from Knott County will follow a road of twenty-two miles from Hindman to Hazard, instead of going, as at present, forty-five miles to Jackson in Breathitt County. In Leslie County the traffic, which since 1883 has been hauled fifty-five miles over the road between Hyden and London in Laurel County, will go, upon the completion of the railroad, a distance of only from twelve to twenty miles. These points and others in their vicinity have had the longest hauls to the railroads, and the new line will be an immense advantage.

[b] In 1797 the law provided for the condemnation of property, to be paid for by a county levy, "for opening or altering roads within a county, to the court house thereof, to public warehouses, landings, ferries, mills, lead or iron works, or to the seat of government," these roads to be kept cleared and smooth for at least thirty feet in width. (Littell's Laws.)

By the act of December 11, 1801, it was directed that all public roads between county seats, salt-works, or seat of government be kept in repair; that

radiate, leading to adjoining seats, local industrial works, and railroad stations. During the past decade the mileage has averaged about 17,432 miles,[1] or one and four-tenths miles per square mile of area[a] and about one mile of road to every twenty-six inhabitants. The total mileage is over one-third that of the entire State.[b]

Railroads have Stimulated Improvements.

Before the era of railroads the improvements made on the highways were scarcely worthy the name. Within

they must be fifteen feet wide, and might be forty feet if the county court so ordered. (*Ibid.*)

According to the act of January 31, 1812, the road must be fifteen feet wide, but need not be more if it appeared "that from the mountainous and broken situation of their country, that it would be unnecessary and oppressive to the citizens to compel them to clear any road or roads thirty feet wide." (Littell's Laws, Vol. IV, p. 361.) Later legislation reduced the minimum. The present law simply fixes a maximum width of sixty feet for all public roads. The mountain roads probably average ten feet in width. Following are the specifications for a road over Pine Mountain, divided into two "lots"; the contract was offered at public outcry from Harlan County court house door, May 24, 1909: "Both of said lots of road are to be ten feet wide and the winds in said road to be forty feet wide. Said roads are to have good green timber for backing. Said roads are to be made level, the high places taken off and low places filled and to be dug down level and good stone culverts made to carry off the water where needed." (Harlan Enterprise, May 14, 1909.)

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[a] According to a Federal report of 1904, this varied in the counties from sixteen hundred miles, or three and five-tenths miles per square mile, in Clay, to seventy-five miles, or three-tenths miles per square mile, in Martin—the greatest and least per cent in the State. (See Table 5, Appendix.)

A State report of 1907 gives the variation from fifteen hundred miles in Pulaski and Johnson to one hundred and fifty miles in Harlan. (Kentucky Bureau of Agriculture, Table opp. p. 185, 1907.) Both reports indicate that the mileage is least where there is a concentration of population, brought about either by the railroads, as in Boyd, Estill, and Greenup counties, or by the rough topography in those counties situated on the headwaters of the main streams where the concentration has taken place in the more fertile valleys—for example, Knott, Perry and Martin counties. The two tables show such wide discrepancies in details, however, as to render them valueless for purposes of comparison.

[b] The report of 1904 shows for the State one and four-tenths miles of road per square mile of area, and one mile of road to every thirty-seven inhabitants.

the past twenty years, however, there has been a decided change for the better. In all the counties with railroad connections there are now numerous stretches of road, eight to ten miles in length, which afford comparatively good transportation for wagons. In some localities—Bell and Whitley counties for instance—where the development of coal and timber properties has greatly increased the wealth of the community, substantial bridges have been built by the counties or the railroad companies, and these have markedly facilitated travel. Even in such counties, however, the number of wagon roads and the quality of the improvements are in direct ratio to the distance from the railroads. Progress has been slowest in the extreme southeastern section of the mountains, where the exceptionally rough topography has delayed improvements even where railroads have begun to penetrate.[a] In this district saddles,[b] and sleds drawn by oxen, are used much more

Progress Slowest in Southeastern Section.

[a] Immediately to the west of Pine Mountain the high ridges between Line Fork, Greasy, and Cutshin creeks, at the headwaters of the Kentucky River in Leslie County, can be ascended with the greatest difficulty because of a thick detritus of stones, washed downstream from a coarse sandstone outcropping in the locality. Consequently, until 1890, no wagon roads were attempted, and but few are found at the present time. (Kentucky Mines, 1901–2; Reports on Eastern Coal Fields, Chap. XV, p. 50.)

In the upper Cumberland Valley a wagon road has long been maintained in the direction of the old State road leading from Pineville to Harlan, thence up Poor Fork to Pound Gap, with extensions over Cumberland Mountain, via Martin's Fork and Clover Fork, to a railroad in Powell's Valley, Virginia. But to the west, across Pine Mountain, there has been no wagon-way until recently, when road building has been stimulated by a branch railroad now in progress of construction up the Cumberland River.

[b] Saddles of a most primitive type are to be seen throughout the mountains. The better sort have bags, in which heavy loads are carried. Much of the farm produce reaches the country stores in this way. Handmade baskets are also

than wagons for both commerce and travel. Indeed much of the travel is undertaken afoot at all seasons of the year.

Federal Object-Lesson Roads.

The United States Department of Public Roads has, since 1894, been building roads in the different States, as object-lessons to the people. The government furnishes engineers, machinery, and men; the locality pays the other expenses. Under these conditions, between August 2, 1906, and November 16, 1907, a stretch of road 5,780 feet long was macadamized in the vicinity of Paintsville, Johnson County; $9,750.74 was supplied by the county. Similarly, between July 29, 1907, and October 8, 1908, a section of the old Wilderness Road through Cumberland Gap was improved. The work consisted in building 12,300 feet of macadam, besides 900 feet of road graded, but not surfaced, with stone, at a cost of $7,050 per mile. Of this amount

attached to the saddle, and are often filled to the brim with eggs, berries, poultry, etc. The horse usually carries, in addition, two members of the family and sometimes more. Until recently old-fashioned pack-saddles were common. Speed's description of the ones brought in by the pioneers applies almost as well to those substitutes in use in the mountains to-day: "A rude contrivance made of the forked branch of a tree. . . . When fastened upon a horse it became the receptacle of the goods and chattels to be transported. Thus were carried provisions for the journey and the household stuff and utensils. . . . The fork had to have a particular shape, and the branch of a tree which could be made into a saddle was an attractive object. . . . This method of carrying burdens caused the word 'pack' to be used for 'carry,' and the misuse of the word is still common among Kentucky people." (Speed, Wilderness Road, p. 73.)

According to Shaler: "At the time when Kentucky was settled the European pack-saddle was still in general use in this country. It was almost the only means of conveying burdens employed down to the end of the sixteenth century. It held on in Virginia for more than a century after it had generally passed out of service in the Old World. Remnants of its use may still be found in some of the sequestered corners of the Southern Appalachians. But for this simple instrument the settlement of Kentucky would hardly have been possible, for it was many years before a wagon road was constructed." (Shaler, History of Kentucky, note, pp. 59, 60.)

A Forest Trail

Over conglomerate cliffs in Menefee County, in common use by the natives as a "short cut."

U. S. Forest Bureau.

(See p. 56.)

Bell County furnished $3,000, Claiborne County, Tennessee, $3,000, and Lee County, Virginia, $750. The remainder was subscribed by corporations and individuals. The completion of the work proves that the construction of highways suited to modern commercial conditions is possible in the mountain region, but the expense and difficulties involved show conclusively that the mountain people can not hope to secure such highways unless they are given assistance from without.[a]

Administration of the Road Law difficult because of Physical Conditions.

The administration of the road law, difficult under any circumstances, has been peculiarly so in the mountains. The rough and steep topography, together with the heavy rains, make not only the original construction, with the

[a] Following is the government report on the Wilderness Road. For the report on the Paintsville road see the Annual Report of the Department of Agriculture, Public Roads, 1908, p. 784.

"Cumberland Gap, Tenn.—The work at Cumberland Gap, Tenn., consisted in building 12,300 feet of macadam road 14 feet wide from Cumberland Gap, Tenn., toward Middlesboro, Ky., besides 900 feet of road which were graded, but not surfaced with stone. Work was begun July 29, 1907, and the road was completed October 9, 1908. On account of the mountainous country an unusual amount of rock excavation was required in order to establish a satisfactory grade, and most unfavorable weather conditions delayed the completion of the road very much. Work was suspended for four months during the winter, in addition to seventy-six days which were lost on account of rain or bad weather. This road is known as the Tri-State road, since it lies partly in the three States—Virginia, Kentucky, and Tennessee.

"The earth was excavated with plows and scrapers, and the rock was drilled by hand, blasted, and hauled in wagons to the fills. The old road had a minimum grade of 5 per cent and a maximum grade of 15 per cent. The new road has a minimum grade of 3 per cent and a maximum grade of 10 per cent. In addition to a rock-wall culvert 28 feet long, 173 feet of 12-inch drainpipe were used and 118 feet of 10-inch pipe. The machinery furnished by the office consisted of four No. 2 wheel scrapers, four No. 2 drag scrapers, one No. 6 plow, one rooter plow, two 2-yard dump wagons, one 450-gallon sprinkler, one 10-ton roller, and one crushing plant with an average capacity of 10 tons per hour. Plows, scrapers, carts, and wagons were furnished by the local authorities as

necessary grading and ditching, but the maintenance of the roads as well, an arduous and expensive task. Moreover, in contrast to Central Kentucky, where an abundant and easily accessible limestone makes excellent roads, this region is lacking in materials of which permanent roads may be constructed. It is true that sandstone and shale abound, but they are irregularly distributed, and besides are generally too soft and friable for the purpose. Gravel is found in a few scattered localities, and the limestone which outcrops on Pine Mountain and the western escarpment might be utilized. In general, however, the material would have to be imported at great expense. In the past, therefore, the mountains have been condemned to the dirt road, corduroyed with timber, which must be worked

Lack of Good Road Metal.

required. The average haul for excavation was 200 feet, and from crusher to road 2,250 feet. The crusher was located at the highest point on the road, at a distance of 500 feet from the quarry, which furnished a very satisfactory grade of limestone. It was necessary to pipe water 900 feet to the crusher, and the average haul of water for the sprinkler and roller was 1,200 feet. The finished macadam surface was made up of a 6-inch foundation course of stone between $1\frac{3}{4}$ and 3 inches in size, a second course, 2 inches thick, of stone between three-fourths inch and $1\frac{3}{4}$ inches in size, and a surface course of screenings below three-fourths inch, which was sufficient to fill the voids in the second course. In grading, 22,994 cubic yards of earth and rock were excavated, at a cost of from $0.27 to $0.70 per cubic yard, and for the macadam work 6,380 cubic yards of limestone were quarried at the rate of $0.36 per cubic yard, and crushed at $0.295 per cubic yard. With labor at $1.25 and teams at $3 per day, the total cost of this road, including excavation, macadam, and drainage, was $7,050 per mile, while the cost of the macadam alone was $0.35 per square yard, or $2,875 per mile." (*Ibid.* Annual Report, 1909, p. 10.)

Besides the government roads there is a short stretch of macadam road (one to twenty miles) in a number of counties—Boyd, Estill, Pulaski, Rockcastle, Wayne. These are all marginal counties, however, and the roads, except in Boyd, are not within the mountain region. (See Note a, p. 6.) In Wayne County the road of twenty miles is maintained by tolls. The same is true of ten miles in Estill County.

constantly if it is to be kept in a passable condition. The expense steadily increases also as the forest retreats toward the headwaters. Again, the gradual utilization of all the bottom lands—the natural roadways—for agriculture has relegated the roads more and more to the steep ridge land and to the water-courses, thereby adding to the cost of maintenance. For the same reason the roads have been uniformly narrow and confined to a single tract, so that often there is not sufficient room for proper drainage.

Further hindered by Spoils System in Politics.

The administration of the law is further hindered by the spoils system of politics, which, common everywhere in Kentucky, flourishes in the mountains in all its pristine vigor. Here it is never certain that money collected for roads will be spent on them. Overseers and contractors are never indicted by the grand jury for non-performance of duty. Delinquent taxpayers and laborers are not compelled to pay their legal fines, because prosecutors and defendants are alike offenders against the law, the enforcement of which is left to the discretion of the county officials. This and other factors[a] preventing the improvements which are possible even under the antiquated law have their root in the constitution of the county government, which provides for no assemblies where the people may meet to

County Government provides for no Popular Assemblies.

[a] One of the chief impediments is the lack of coöperation among the counties. For example, the main road from Leslie County passes through Clay and Laurel counties to London. It is Leslie's principal outlet to market, and over it is hauled practically all of its incoming merchandise. Clay and Laurel, however, have other railroad connections, and so neglect the part of the road lying within their districts that there is no incentive to Leslie to improve its section.

"discuss the affairs that most concern their life."[a] On the contrary, political discussions are confined to stump speeches concerned only with big issues, which are of little help in settling local problems such as the construction of roads and bridges.

Continuance of Road Law has caused Anomalous Condition.

Since the withdrawal of State aid, the continuance of the inadequate road law and the political separation of the mountain counties from the Bluegrass[b] have brought about an anomalous condition. For some sixty years the most sparse and widely scattered population of the State—the one most noted for its lack of education and wealth—has been left to itself to solve the problems of highway transportation, in a country where the natural difficulties are so great that for the proper construction and maintenance of roads not only the best engineering skill is required, but also a large expenditure of capital and labor. The multiplication of counties, and a slow but constant increase in population and wealth, have rendered the enforcement of the road law increasingly effective, and in some counties, as noted above, there have been made determined efforts for improvement which have effected local adaptations of the law considerably augmenting the expenditures.[c] Never-

[a] The absence of good local government is an evil throughout the South, where the county system prevails in contrast to the New England township system. For a comparison of the two see John Fiske, Civil Government in the United States, pp. 54–67; Shaler, History of Kentucky, pp. 398–399.

[b] See pp. 7, 8.

[c] The general law provided for many exemptions from liability to road duty. Since 1804 all ministers "duly qualified to preach the gospel" have not been

A County Road.

The beds of streams for long stretches serve as highways.

Berea Quarterly.

theless, the result in general has been eminently unsatisfactory, and the disbursements have been inadequate to cope with the natural difficulties.[a]

Conclusion.

The history of the mountain roads manifests the inability of the people to provide themselves with efficient highways, shows the insufficiency of the aid given in the past, and makes plain the inadequacy of the present law. The lack of good roads has caused an undue isolation, has prevented coöperative activity and the realization of the ideals of a modern community life, and has retarded the

liable. The act of December 3, 1822, exempted persons over fifty years of age. The act of 1894 fixed the age limit from eighteen to fifty years, and exempted "licensed ministers" and citizens of incorporated towns and cities. The law demands an annual service of from two to six days, of eight hours each, except in case of an "emergency," when the overseers may require more. (Section 22.) Many counties require six days. In Pike, however, the overseers are allowed to demand two days a week when necessary. In Rockcastle six days, and as many more as are necessary for the accomplishment of certain results, are required. In Greenup three days only are demanded. (Kentucky Bureau of Agriculture, 14th Annual Report, pp. 254, 262; U. S. Department of Agriculture, Office of Public Roads, Circular 58.)

The law of 1797 provided for the impressment of "necessary carriages, draught horses or oxen, with their gear and driver, belonging to any person who, or their servants or slaves," were appointed to work on the road. They were to be paid for out of the "next county levy." By an act of January, 1831, plows and teams might be "hired" for use on the roads. The present law permits the counties to own road machinery and tools. (Section 4318.) Some of them now own grading machines—two in 1907. But the present law, as did that of 1797, requires persons working on the road to provide themselves with the "necessary tools and implements." (Section 4308.) As a rule the implements consist of a rake, an ax, and a weeding hoe.

[a] In 1904, when the average price for road labor varied from fifty cents in Johnson County to a dollar in the majority of counties and a dollar and a half in Elliott, the total expenditure upon the roads, including a poll and property tax levied in a number of counties, amounted to $418,605, or about $24 per mile of road. The average expenditure for the rest of the State was $43.57 per mile. The amounts varied greatly in the different counties, from a maximum of $90 in Pike to a minimum of ninety-six cents in Wolfe, aggregating $27,000 and $480 respectively. The maximum total expenditure was $33,000 in Pulaski and the minimum as given in Wolfe. (See Table 5, Appendix.)

development of natural resources by the exaction of enormous freight tolls,[a] which in turn has blinded the people to their own needs. The State or Federal government could render valuable assistance to road-building. The new constitutional amendment is a step in the right direction, but to avoid a repetition of past mistakes, before the adoption of a definite policy of State aid there should be a careful consideration of the economic conditions and requirements of the mountain region.[b]

[a] The present freight on merchandise is about one dollar per hundred pounds for forty-five miles. The average haul for a load of cross-ties is only from eight to ten miles, and eight to twelve ties constitute a load, while on a good road twenty would be an easy load. Logs delivered at the railroads for $20 a load consume $16 in transportation, which is at least twice the amount it would cost to haul them over a macadam road. (W. H. Haney, The Mountain People of Kentucky, pp. 41–43.)

[b] Since the system now proposed necessitates an increased taxation it would impose a burdensome debt on many counties, and will probably meet with but little response from this section. There is a deep-rooted prejudice against taxation of any kind, due to the general impoverished condition of the population. The Auditor's report for 1906 shows the average per capita State and county tax to be $1.27. Some of the Bluegrass counties paid four times that amount—Woodford $4.26, Fayette $4.11—while in the mountains the tax varied from forty cents in Elliott and forty-two cents in Menefee to $1.75 in Boyd and $1.33 in Harlan. The mountain county levies—the lowest in the State—seldom if ever reach the legal maximum. In Harlan County, for example, the assessment has recently averaged twenty-five to thirty-five cents on the dollar, leaving fifteen cents which might have been devoted to road purposes. With the exception of Boyd, all the mountain counties are "pauper counties" in the sense that they cost the State more money than they pay into its treasury. The emergence of Boyd County from this class in 1901 was due to the increase of manufacturing in the two towns of Ashland and Catlettsburg, on the Ohio River. (Biennial Report of the Auditor of Public Accounts.)

These factories are based on the local coal supply, and similar plants are increasing in number along the railroads as the coal is developed. Middlesboro, in Bell County, also contains important plants. In 1900 Bell and Boyd counties contained 172 manufacturing establishments, with an aggregate capital of $5,201,489. This amount, however, was considerably more than one-half the

Ferry at Crossing of Cumberland River by a County Road just below Pineville (Cumberland Ford).

U. S. Forest Bureau.

capital invested in manufactures in all other counties. Indeed, many of the plants had less than $1,000 invested in them.

The only property capable of making large returns is forest and coal land, much of which is owned at the present time by non-residents, and upon which the assessed valuation and tax rate are comparatively very low, the latter ranging from one and one-half per cent of the value of the land. Up to the present, vast areas have returned little or no revenue to the State or county. An increase in taxation, however, would be opposed to the policy of conservation. (See Table 4, Appendix.)

Investments in unsuccessful railroad projects has increased the prejudice against taxation. The general sentiment is indicated in the following "Notice to Road Overseers," signed by the county judge of Harlan and printed in the local newspapers: "You are hereby requested to each put his precinct in good repair by the 15th of August at the latest. There is no road tax this year and the poll tax is only one dollar, so I hope we will have no kicking but will promptly get down to business, and help ourselves and our county too by putting our roads in good repair." (Harlan Enterprise, July 24, 1909.)

REFERENCES

1. Public Roads of Kentucky, Mileage and Expenditures in 1904. United States Department of Agriculture, Circular No. 58. Also Bulletin No. 32. 1907.
2. Table Showing the Road System of Kentucky by Counties, and how Constructed and Maintained (1907). Kentucky Bureau of Agriculture, 17th Biennial Report, opposite p. 185.)

APPENDIX

APPENDIX

TABLE I[a]

Population—Nativity and Illiteracy—1900

Counties of Eastern Coal Field.	Total Population.	Foreign Born.	Per Cent of Illiteracy, White Voters.[b]
Bell	15,701	186	23.7
Boyd	18,834	400	15.6
Breathitt	14,322	7	32.4
Carter	20,228	75	23.8
Clay	15,364	3	35.2
Clinton	7,871	5	25.3
Elliott	10,387	6	29.9
Estill	11,669	9	26.4
Floyd	15,552	10	30.5
Greenup	15,432	104	24.6
Harlan	9,838	3	30.0
Jackson	10,561	3	28.0
Johnson	13,730	1	21.3
Knott	8,704	3	35.7
Knox	17,372	21	24.4
Laurel	17,592	485	14.2
Lawrence	19,612	27	23.0
Lee	7,988	19	24.3
Leslie	6,753	2	35.2
Letcher	9,172	.....	27.8
Magoffin	12,006	68	29.7
Martin	5,780	4	28.8
Menefee	6,818	13	20.4
Morgan	12,792	36	15.8
Owsley	6,874	1	27.7
Perry	8,276	1	31.4
Pike	22,686	6	32.1
Powell	6,443	13	18.3
Pulaski	31,293	120	17.7
Rockcastle	12,416	36	21.9
Rowan	8,277	19	22.1
Wayne	14,892	20	24.2
Whitley	25,015	202	19.6
Wolfe	8,764	4	19.9
Total[b]	449,014	1,912	.....
Kentucky (whole State)	2,147,174	50,249	13.9

[a] The figures are from the reports of the U. S. Census Bureau. The figures for counties along the western margin are too large, as but small areas of such counties are within the coal field. This is especially true of Wayne, Clinton, and Rowan. (See Note a, page 6.)

[b] Computed.

TABLE II

Areas—Population, White and Negro—1900, 1860

Counties of Eastern Coal Field.	Area in Square Miles.	White Population.		Negro Population.		
		1900	1860	1900	1860	
					Free	Slaves
Bell	369	13,947	.....	1,754	.....	.....
Boyd	175	18,051	5,871	771	17	156
Breathitt	480	14,023	4,750	299	25	190
Carter	515	20,085	8,170	143	37	309
Clay	457	14,800	6,041	564	262	349
Clinton	224	7,691	5,503	175	20	258
Elliott	255	10,385	.....	2	.....	.....
Estill	255	11,446	6,363	223	16	507
Floyd	387	15,416	6,168	136	73	147
Greenup	318	15,160	8,350	272	47	363
Harlan	470	9,612	5,352	226	15	127
Jackson	351	10,542	3,059	19	21	7
Johnson	266	13,729	5,260	1	19	27
Knott	341	8,535	.....	169	.....	.....
Knox	352	16,618	7,034	754	184	489
Laurel	448	16,932	5,301	654	1	186
Lawrence	433	19,427	7,443	185	12	146
Lee	200	7,717	.....	271	.....	.....
Leslie	397	6,678	.....	75	.....	.....
Letcher	348	9,126	3,787	46	9	108
Magoffin	300	11,785	3,338	136	76	71
Martin	224	5,765	.....	15	.....	.....
Menefee	199	6,777	.....	41	.....	.....
Morgan	375	12,739	8,986	53	81	170
Owsley	206	6,801	5,205	73	18	112
Perry	335	8,115	3,863	161	14	73
Pike	760	22,496	7,247	190	40	97
Powell	177	6,068	2,108	375	24	125
Pulaski	754	29,957	15,819	1,336	52	1,330
Rockcastle	308	12,259	4,946	157	40	357
Rowan	270	8,223	2,139	54	1	142
Wayne	617	14,281	9,244	608	28	987
Whitley	578	24,246	7,552	769	26	183
Wolfe	239	8,667	.....	97	.....	.....
Total[a]	12,383	438,099	158,899	10,804	1,158	7,016
Kentucky (whole State)	40,000	1,862,309	919,484	284,706	10,684	210,981

[a] Computed.

Appendix

TABLE III

Population by Counties—1910, 1860

Counties of Eastern Coal Field.	1910.	1860.
Bell	28,447	.....
Boyd	23,444	6,044
Breathitt	17,540	4,980
Carter	21,966	8,516
Clay	17,789	6,652
Clinton	8,153	5,781
Elliott	9,814	.....
Estill	12,273	6,886
Floyd	18,623	6,388
Greenup	18,475	8,760
Harlan	10,566	5,494
Jackson	10,734	3,087
Johnson	17,482	5,306
Knott	10,791	.....
Knox	22,116	7,707
Laurel	19,872	5,488
Lawrence	20,067	7,601
Lee	9,531	.....
Leslie	8,976	.....
Letcher	10,623	3,904
Magoffin	13,654	3,485
Martin	7,291	.....
Menefee	6,153	.....
Morgan	16,259	9,237
Owsley	7,979	5,335
Perry	11,255	3,950
Pike	31,679	7,384
Powell	6,268	2,257
Pulaski	35,986	17,201
Rockcastle	14,473	5,343
Rowan	9,438	2,282
Wayne	17,518	10,259
Whitley	31,982	7,762
Wolfe	9,864	.....
Total [a]	537,081	167,089
Kentucky (whole State)	2,289,905	1,155,684

[a] Computed.

TABLE IV

MANUFACTURES—1900

Counties of Eastern Coal Field.	Number of Establishments.	Capital[a] per Establishment.	Men 16 Years and Over.	Women 16 Years and Over.	Children under 16 Years.	Capital.	Value of Product.
Bell	42	$46,818	765	.....	6	$1,966,351	$1,968,504
Boyd	130	24,886	1,763	28	52	3,235,138	5,108,228
Breathitt	17	8,547	68	.....	2	145,305	164,835
Carter	48	4,127	255	.....	.....	198,110	193,610
Clay	23	1,023	20	.....	.....	23,522	46,104
Clinton	28	1,207	31	.....	.....	33,796	74,935
Elliott	36	682	26	.....	.....	24,573	94,536
Estill	36	5,464	91	.....	.....	196,720	200,423
Floyd	23	1,489	23	1	.....	34,265	54,086
Greenup	34	1,695	88	.....	.....	57,616	163,068
Harlan	27	857	7	.....	.....	23,137	36,422
Jackson	21	689	11	.....	.....	14,468	35,709
Johnson	18	1,122	18	.....	.....	20,191	42,910
Knott	13	916	2	.....	.....	11,910	31,862
Knox	30	2,010	34	.....	3	60,304	104,835
Laurel	42	4,329	147	4	3	181,807	206,464
Lawrence	57	1,997	75	2	2	113,808	212,260
Lee	16	4,744	41	.....	.....	75,912	86,424
Leslie	No report.	.....	.....	.....	.....	.....	.....
Letcher	21	847	16	.....	.....	17,797	57,759
Magoffin	12	9,204	134	1	.....	110,450	375,692
Martin	4	7,255	27	.....	.....	29,020	30,695
Menefee	18	8,281	38	.....	.....	149,053	124,387
Morgan	17	1,111	61	.....	.....	19,888	56,480
Owsley	17	630	12	.....	.....	10,705	29,751
Perry	19	730	8	.....	.....	13,865	26,642
Pike	34	1,909	47	.....	.....	64,898	109,427
Powell	24	12,348	96	.....	3	296,351	343,020
Pulaski	102	5,183	381	3	10	528,715	783,099
Rockcastle	31	1,816	46	.....	.....	56,290	102,289
Rowan	35	4,161	161	.....	3	145,650	275,592
Wayne	40	1,134	25	.....	.....	45,356	91,248
Whitley	110	2,971	261	5	1	326,761	610,526
Wolfe	31	3,750	75	.....	.....	116,261	151,373
Total[a]	1,156	7,221	4,853	44	85	$8,347,993	$11,993,195
Kentucky (whole State)	9,560	10,886	51,101	9,174	2,687	104,070,791	154,166,365

[a] Computed.

Appendix

TABLE V

Public-road Mileage and Expenditures, 1904.[a]

Counties of Eastern Coal Field.	Miles of public roads.			Expenditures in money and labor on roads.						
				Property and poll taxes.		Labor tax.				
	Total of all public roads.	Surfaced with gravel.	Surfaced with stone.	Road levy—rate per $100.	Amount of tax.	Number of men subject to tax.	Days' labor required.	Average wages per day for road work.	Value of labor tax.	Total cash and labor taxes.
				Cts.	*Dollars.*			*Dolls.*	*Dollars.*	*Dollars.*
Bell	275	...	10	10	3,000.00	1,500	6	1.00	9,000	12,000.00
Boyd	182	...	20	...	12,000.00	.....	....	.....	.....	12,000.00
Breathitt	450	...	...	...	1,500.00	2,000	6	1.00	15,600	17,100.00
Carter	1,000	...	...	8	1,450.00	4,000	6	1.00	24,000	25,450.00
Clay	1,600	1	10	...	.....	2,000	6	.75	9,000	9,000.00
Clinton	200	...	...	6	400.00	1,000	6	1.00	6,000	6,400.00
Elliott	1,500	...	...	15	2,000.00	1,800	6	1.50	16,200	18,200.00
Estill	300	3	12	...	1,000.00	1,400	6	1.00	8,400	9,400.00
Floyd	300	...	...	...	.....	1,500	6	1.00	9,000	9,000.00
Greenup	300	...	...	25	4,000.00	1,200	3	1.00	3,600	7,600.00
Harlan	500	...	...	...	.....	1,800	6	1.00	10,800	10,800.00
Jackson	300	...	...	...	.....	1,592	6	1.00	9,552	9,552.00
Johnson	150	...	...	...	.....	2,400	6	.50	7,200	7,200.00
Knott	150	...	...	...	500.00	1,000	6	1.00	6,000	6,500.00
Knox	700	...	...	...	2,000.00	3,500	6	1.00	21,000	23,000.00
Laurel	600	...	...	...	.....	2,000	6	.75	9,000	9,000.00
Lawrence	500	...	...	25	12,000.00	2,500	6	1.25	18,750	30,750.00
Lee	500	...	...	...	20.00	1,786	6	1.00	10,716	10,736.00
Leslie	250	...	...	...	.....	1,100	6	.75	4,950	4,950.00
Letcher	300	...	...	...	3,000.00	1,400	6	1.00	8,400	11,400.00
Magoffin	550	...	...	10	1,000.00	1,397	6	.75	6,287	7,287.00
Martin	75	...	...	25	1,200.00	700	6	.75	3,150	4,350.00
Menefee	1,000	...	...	...	.....	1,000	6	1.00	6,000	6,000.00
Morgan	400	...	...	...	3,000.00	1,500	6	.75	6,750	9,750.00
Owsley	300	...	...	...	.....	600	6	1.00	3,600	3,600.00
Perry	300	...	...	...	.....	1,000	6	1.00	6,000	6,000.00
Pike	300	...	...	10	3,000.00	4,000	6	1.00	24,000	27,000.00
Powell	400	...	...	20	1,500.00	1,400	6	.75	6,300	7,800.00
Pulaski	1,000	...	10	25	15,000.00	3,000	6	1.00	18,000	33,000.00
Rockcastle	500	...	...	15	1,500.00	1,800	6	1.00	10,800	12,300.00
Rowan	500	...	...	...	.....	1,000	6	1.00	6,000	6,000.00
Wayne	550	...	21	...	3,000.00	2,000	6	1.00	12,000	15,000.00
Whitley	1,000	...	...	...	.....	5,000	6	1.00	30,000	30,000.00
Wolfe	500	...	...	...	.....	80	6	1.00	480	480.00
Total	17,432	...	...	...	61,270.00	60,555	....	.....	327,635	418,605.00
Kentucky (whole State)	57,137	...	...	...	1,161,194.03	186,757	....	.....	987,495	2,148,689.03

[a] Bulletin No. 32, U. S. Department of Agriculture, Office of Public Roads. 1907.

Appendix

A MOUNTAIN SERMON

[From the *Berea Quarterly*.]

NOTE.—The following sermon was reported with considerable accuracy by a Berea student. No single discourse should be taken as fairly representative of an entire people. This sermon contains the usual topics—doctrine, experience (the most saving element), and reproof of the church. While lacking in refinement, and exhibiting that "zeal which is not according to knowledge," its manly vigor will command respect. *The language abounds in quaint idioms*, and *Saxon survivals like the pronoun "hit."*

The hard-shell Baptists, while numerous, are not at present a rapidly growing body, and are being supplanted by "Missionary Baptists," Christians or "Reformers," and the like.

"My brethering, you'll fine my tex' somers in the Bible, an' I haint agoin' ter tell yer whar: but hit's thar. Ef yer don't believe hit, you jest take down yer Bible an' hunt twell yer fine hit, an' you'll fine a heap more thet's good, too. My tex' is this: 'On this rock will I build my church, an' the gates of hell shall not prevail against hit.'

"Now, I'm goin' ter speak the truth ter-day no matter who hit hits. Ef they's ary man in this aujience thet don't agree with me, thet's his lookout, an' not mine. The question fur us ter answer 'bout this tex' is this: Wut church war hit thet the Lord founded? Wut church is hit thet the gates of hell haint agoin' ter prevail against? I'm agoin' ter answer thet question ; an' I'll tell yer wut church hit is ; hit's the Ole Hardshell Baptist church ; thet's wut church hit is.

"A heap o' people says hit war the Christian church. Well, hit warn't. The Campbellites says they're Christians ; the Methodis' says, 'We'er Christians, too.' Wall, I haint a Christian : I'm a Babtist. I fine in the Bible thet the disciples war fust called Christians at Antioch. Not at Jerusalem. The Lord never called the church Christians, nur no person else thet had ary right ter gin the church a name. The Lord founded the church when He went down inter the warter, an' the gates of hell shall not prevail against hit.

Appendix

"Neow they's a heap o' people don't lack the doctrings of this hyur church cus we teach predestination. Now I wanter tell you. Them folks is jist lack a ole hoss-ah! You *fotch* him out at night-ah! an' you go fur to carry him home-ah. An' you come up nigh onter a ole black stump-ah, a settin' by the side of the road-ah!

"An' wen the ole hoss sees hit he stops-ah! An' his yurs pints right straight at the stump-ah! an' every har on his back pints right straight at his yurs-ah! an' he says : 'There he is-ah! Thar's the booger-ah! Oh! he'll ruin me-ah! An' thar he stan's-ah! with his laigs stiff lack fence-rails-ah! an' you caint git him apast that ole stump-ah! But ef you've got a good strong bridle-ah! yer kin git him up *fernent hit-ah!* an' then he gives a great snort, so—boo-ooh! an' goes by hit with a jump-ah! an' twarn't nothin' but a stump none of the time. Now brethering, they haint no more harm in the doctrings of the ole Hardshell Babtist church-ah! than they is in thet ole stump-ah!

"Now look ahere-ah! We fine when we read the Scriptures of divine truth-ah! thet Solomon he built a temple-ah! an' he hed all the work done way off-ah! so they warn't no sound of hammer to be heerd at the building-ah! An' the timber war ahewed-ah! an' asquared-ah! an' aplumbed-ah, way out in the mountings-ah! an' then King Solomon he gin orders-ah! fur ter make the timbers up into raftis-ah! an float 'em down ter Joppy-ah! Now, jes' supposing some of them workmen hed a said-ah! one of the hewers o' wood, or drawers o' warter hed a said-ah! 'I'll squar' this timber-ah! an' I'll *plumb* hit-ah, but taint while fur me ter immerse *hit* all over in the water-ah! I'll jis' take a little warter-ah! an' sprinkle on them timbers-ah! Thet'll do jist as well-ah! Hit taint no savin' orjince nohow-ah! How do yer reckon them timbers wud agot down ter Joppy-ah! An' ef the timber hadn't agot thar, how'd Solomon abuilt the temple-ah! An' now, ef you're atryin' ter get ter heaven-ah, how do you reckon you'll git thar ef you stay on the bank asprinklin' warter on yourself-ah! an' on lettle babies thet haint repented of

thur sins-ah! stidder goin' down *in*to the warter-ah! Do you reckon you'll ever git thar?

"No sir-ah! You mought as well make a church outer the devils in hell as o' thet sorter people-ah! Fur on this rock I will build my church-ah! an' the gates of hell shall not prevail against hit-ah!

"But Oh! my brethering-ah! How well I remember-ah! jis' lack hit war yistidy-ah! the time wen I foun' the Lord-ah! a heap o' people sez they caint tell the time-ah! nur the place-ah! Wull, I reckon they caint-ah! Kase they haint never aben no time an' no place-ah! Ef a man's hed peace spoke to his never-dyin' soul, he kin mighty soon tell the time 'n' the place-ah! Oh! I remember hit well-ah! I war twenty-one an' agoin' on twenty-two years of age-ah! An' I went ter meeting-ah! an' I went home afeelin' mighty bad, kase some o' the gals hed slighted me-ah! kase I war lame-ah! An' I felt bad thet they wouldn't show me as much 'tention as t'other young men thet war cumridges o' mine-ah! An' agoin' hum-ah! I rode off by myself-ah! ter go hum by a roundabout way-ah! O my brethering-ah! I reckon I war afeeling sorter lack poor ole Joner-ah! lack I'd love to go off in the ships of Tarshish-ah! An' I felt jist lack I wouldn't akeered p'ticular ef hit hed aben the whale's belly-ah!

"Wull I got out on the mounting-ah, an' 'peared lack I couldn't go home-ah. An' I got off my hoss an' sot down under a hick'ry tree-ah, afeelin' lack 'Lijah wen he sot under the juniper tree-ah, awishing he cud die-ah. An' awhilst I war thar, they come up a powerful big storm-ah, an' my nag got loose an' I couldn't ketch her, an' off she went fur home-ah! aleavin' me on the mounting-ah. Oh! my brethering, how hit thundered-ah! An' peared lack the hull sky war one streak o' lightenin'-ah. An' the limbs commenced ablowin' off'n the trees-ah! An' the trees began abendin'-ah! An' the warter came down in sheets-ah, an' wet me to the skin-ah! Now, I jist want to tell you I got over wantin' to die, mighty soon-ah! Oh! then I begun to realize thet they's somethin' comes after death-ah! An' I warn't ready fur hit-ah! Oh, my brethering,

Appendix

I thought I'd prayed before-ah, but I found thet night I hadn't never done it before-ah! I prayed an' prayed, an' every streak o' lightnin' I thought I could see an angry God above me, an' a yawnin' hell below me-ah! But right wile the storm war aragin'-ah, an' the lightnin' war aflashin'-ah, an' the thunder war acrackin'-ah, the Lord spoke peace to my never-dyin' soul-ah! I seed the lightnin' but hit didn't skeer me. I heerd the thunder, but I warn't afeard no more. I felt the rain soakin' me, but peared lack hit didn't wet me then. I jist felt lack singin' an' I sung an' prayed an' shouted thar all night, an' they found me in the mornin' an' come to whar I war by them ahearin' me asingin'. Thet were thirty-two years ago the fourteenth day o' this month, an' I kin jis shet my eyes an' see the place whar I foun' the Lord. I cud go to thet ole hick'ry tree the darkest night the Lord ever made. An' wen they axed wut church I'd jine, I sez, sez I, 'Lemme jine the Baptist,' sez I ; 'not the Missionary Baptist, nor the reg'lar Baptist, but the ole, Two Seed, Iron Jacket, Predestination, Hardshell Baptist-ah!' For on this rock I will build my church, and the gates of hell shall not prevail against hit-ah.

"But Oh! my brethering-ah! we fine thet a heap of them thet's in the church is mighty nigh as bad as them thet's out, an' some Babtists haint much better 'n' other churches. The world's awaxin' wuss an' wuss an' pears lack the eend haint fur off. Wy, the Babtists over in Laurel thar aroun' me is gettin' too stuck up to wash one another's feet. They uster hev foot-washin's reg'lar. But now I hev to go over into Whitley to get my feet washed. Wy brethering, wen the church was founded footwashin' war a part on it ; an' I do hate to see the Babtists-ah! agoin' back into the beggarly elements of the world-ah! For on this rock I will build my church-ah! an' the gates of hell shall not prevail against hit-ah!"

BARBARA ALLEN

[From the *Berea Quarterly.*]

Mountain Version.

All in the merrie month of May
When the green buds they were swellin'
Young Jemmie Grew on his death-bed lay,
For the love of Barbara Allen.

He sent his servant to the town,
To the place where she was dwellin'
Saying, "Master's sick and sent for you,
If your name be Barbara Allen."

So slowly, slowly she rose up,
And slowly she drew nigh him;
And all she said when she got there,
"Young man, I think y' are dyin'."

"O yes, O yes, I'm very sick,
Death is upon me dwellin';
No better, better shall I be,
If I don't get Barbara Allen."

"Don't you remember, the other day,
When you war in town a drinkin',
You drank a health to the ladies all round,
And slighted Barbara Allen?"

"O yes, I remember very well,
When I war in town a drinkin'
I drank a health to the ladies all round,
But my love was to Barbara Allen."

He turned his pale face to the wall,
She turned her back upon him.
"Adieu, adieu, to my friends all round,
Adieu to Barbara Allen."

She got in about one mile o' town,
She heard those death bells knellin',
And every time they seemed to say,
"Hard-hearted Barbara Allen."

She looked to the east, she looked to the west,
She saw the corpse a comin'.
Saying, "Lay down, lay down the corpse,
That I may look upon him."

The more she looked, the worse she felt;
She fell to the ground a cryin',
Saying, "If I'd done my duty to-day,
I'd a saved this young man from dyin'."

"O mother, mother, make my bed,
O make it long and narrow;
Young Jemmie died for me to-day,
I'll die for him to-morrow."

*She was buried in the old church yard,
And he was buried a nigh her;
And out of her grave sprang a red rosie,
And out of his a briar.

They grew till they reached the high church top,
And they could not grow any higher;
And there they tied in a true lover's knot,
For all true lovers to admire.

Parallel Verses from two British Ballads.
(Preserved in Child's English and Scottish Ballads. —Vol. 1, Bk. 2, pp. 155-161.)

All in the merrye month of May,
When green buds they were swellin'
Young Jemmie Grove on his death-bed lay,
For love of Barbara Allen.

He sent his man unto her then,
To the towne where she was dwellin':
"You must come to my master deare,
Giff your name be Barbara Allen."

* * * * * * * * * * * * * * * *

So slowly, slowly, she came up,
And slowly she came nye him;
And all she said, when there she came,
"Young man, I think y' are dyin'."

* * * * * * * * * * * * * * * *

"O its I'm sick, and very, very sick,
And 't is a' for Barbara Allen.
O the better for me ye's never be,
Though your heart's blood were a-spilling"

"O dinna ye mind, young man," said she,
"When ye was in the tavern a-drinking,
That ye made the healths gae round and round,
And slighted Barbara Allen?"

He turned his pale face to the wall,
And death was with him dealing;
"Adieu, adieu, my dear friends all,
And be kind to Barbara Allen."

* * * * * * * * * * * * * * * *

She had not gone a mile but twa,
When she heard the death-bell ringing,
And very jow that the death-bell geid,
It cried, "Woe to Barbara Allen!"

* * * * * * * * * * * * * * * *

She turned her bodye round about,
And spied the corps a-coming:
"Laye down, laye down the corps," she said,
That I may look upon him."

When he was dead, and laid in grave,
Her heart was struck with sorrow;
"O mother, mother, make my bed,
For I shall dye tomorrowe."

"Hard-hearted creature him to slight,
Who loved me so dearlye;
O that I had been more kind to him,
When he was alive and near me!"

* * * * * * * * * * * * * * * *

"O mother, mother, make my bed,
O make it saft and narrow;
Since my love died for me today,
I'll dye for him tomorrow."

*The last two stanzas are great favorites and are usually sung also as the conclusion of another ballad about Sweet William and Margaret, in a ballad similar to one preserved in Child.

STATEMENT[a] SHOWING THE NAMES AND "DESCRIPTION OF SERVICE" OF EARLY SETTLERS IN EASTERN KENTUCKY, ENROLLED ON THE PENSION LIST UNDER THE ACT PASSED MARCH 18, 1818.

CLAY COUNTY.

William Jacobs ..... Virginia line.
Jacob Seaborn ..... Virginia line.
Samuel Wood ..... Maryland line.

ESTILL COUNTY.

James Best ..... Virginia line.
Tandy Hartman ..... Virginia line.
Thomas Harris ..... Virginia line.
Israel Meadows ..... Virginia line.
James McChristy ..... Virginia line.
Zachariah Phillips ..... North Carolina line.
William Styvers ..... Virginia line.
Lawrence Ward ..... Virginia line.

FLOYD COUNTY.

Joseph Bouney ..... Virginia line.
Richard Caines ..... Virginia line.
Pleasant Childres ..... North Carolina line.
William Furguson ..... Pennsylvania line.
Garner Hopkins ..... New York line.
William Haney ..... Virginia line.
Gabriel Jones ..... North Carolina line.
Roby Jacobs ..... Virginia line.
Ambrose Jones ..... Virginia line.
Thomas Murray ..... Pennsylvania line.
John Mullens ..... Virginia line.
Nathan Preston ..... Virginia line.
Moses Preston ..... Virginia line.
Cudbeth Stone ..... Maryland line.
John Smith, 3d ..... Virginia line.
Peter Sullivan ..... Virginia line.
Alexander Young ..... South Carolina line.

[a] "Report from the Secretary of War, in relation to the Pension Establishment of the United States." Vol. III. Washington, 1835.

GREENUP COUNTY.

Jeremiah Burns ..... Virginia line.
John Johnson ..... Connecticut line.
Elisha Mayhew ..... Congress regiment.
Godfrey Smith ..... Virginia line
Andrew Zornes ..... Pennsylvania line.

KNOX COUNTY.

Brown Edwards ..... North Carolina line.
John Garland ..... North Carolina.
Christopher Horn ..... Virginia line.
William Henson ..... North Carolina line.
William Patterson ..... Virginia line.

LAWRENCE COUNTY.

David Atkinson ..... Virginia line.
William Bates ..... Virginia line.
Edward Burges ..... Virginia line.
Silas P. Wooton ..... Virginia line.

MORGAN COUNTY.

Alexander Montgomery ..... Virginia line.
Benjamin Wages ..... Virginia line.

PERRY COUNTY.

John Combs ..... Virginia line.
Charles Ellis ..... Massachusetts line.
Anthony Hall ..... Virginia line.
John Kelly ..... North Carolina line.
George McDaniel ..... North Carolina line.
Joshua Mullens ..... Virginia line.
Edward Polly ..... Virginia line.

PULASKI COUNTY.

Francis Aldridge ..... North Carolina line.
Michael Beakman ..... South Carolina line.
Ichabod Blackledge ..... New Jersey line.
John Edwards ..... Pennsylvania line.
James Girdler ..... Pennsylvania line.

PULASKI COUNTY—Continued.

William Hansford.....Virginia line.
William Heath .....North Carolina line.
James Lee .....Virginia line.
John Perry .....Virginia line.
James Rainey .....North Carolina line.
Michael Reagan .....Pennsylvania line.
Thomas Seaton .....Virginia line.
Robert Sayers .....Virginia line.
Michael Young .....North Carolina line.

ROCKCASTLE COUNTY.

William Abney .....Virginia line.
James Chasteen .....Virginia line.
John Hamm .....Virginia line.
William Moore .....Virginia line.
Thomas Onsley, Sen. .....Virginia line.
John Pruett .....Virginia line.
Jacob Stevens .....Virginia line.

WAYNE COUNTY.

Frederick Cooper .....North Carolina line.
Elisha Thomas .....Virginia line.

WHITLEY COUNTY.

Joseph Moore .....New Jersey line.
James Rogers .....North Carolina line.
William Sexton .....Virginia line.
Daniel Twigg .....North Carolina line.

ENROLLMENTS UNDER ACT PASSED JUNE 7, 1832.

CLAY COUNTY.

William Burns .....Virginia line.
Bowling Baker.....North Carolina line.
Jesse Bowling .....North Carolina militia.
John Benge .....North Carolina militia.
John Chandler .....Virginia militia.

CLAY COUNTY—Continued.

Messenger Lewis ..... Connecticut line.
Azariah Martin ..... Virginia militia.
John Phillips ..... South Carolina militia.
Harper Ratcliffe ..... North Carolina militia.
Thomas Stapleton ..... North Carolina militia.

ESTILL COUNTY.

Thomas Brown ..... Virginia militia.
Mathias Horn ..... Virginia line.
William Harris ..... Virginia militia.
William Johnson ..... Virginia militia.
James Noland ..... Virginia militia.
Jesse Noland ..... North Carolina militia.
Richard Oldham ..... North Carolina militia.
Joseph Proctor ..... Virginia line.
Ambrose Powell ..... Virginia militia.
Jesse Robertson ..... Virginia line.
John Stufflebeam ..... Pennsylvania line.
David Snowden ..... Pennsylvania line.
George Sheffield ..... N. Carolina State troops.
Henry Winkler ..... N. Carolina State troops.
John Waters ..... Virginia militia.
Elisha Witt ..... Virginia militia.

FLOYD COUNTY.

Thomas C. Brown ..... Virginia militia.
James Camron ..... Virginia line.
Henry Connelly ..... North Carolina militia.
Edward Darten ..... Virginia line.
Abina Fairchild ..... North Carolina line.
James Harris ..... Virginia militia.
Joshua Hitchcock ..... North Carolina line.
Simeon Justice ..... North Carolina line.
John Moore ..... North Carolina line.
Jonathan Pytts ..... North Carolina line.
James Patrick ..... Virginia militia.

FLOYD COUNTY—Continued.

John Porter ..... Virginia line.
Benedict Wadkins ..... North Carolina line.
Richard Wells ..... North Carolina line.

GREENUP COUNTY.

John W. Howe ..... Virginia line.
James Lawson ..... Virginia militia.
James Patten ..... Pennsylvania line.
Charles Riggs ..... Maryland line.
Clayburn Sartin ..... Virginia line.

HARLAN COUNTY.

Richard Ballew ..... North Carolina militia.
Jesse Brook ..... North Carolina militia.
Berry Cawood ..... North Carolina militia.
Lewis Green ..... Virginia line.
James Hall ..... South Carolina line.
Stephen Jones ..... North Carolina militia.
Henry Shackleford ..... Virginia militia.

KNOX COUNTY.

Job Broughton ..... Georgia militia.
James Chick ..... Virginia militia.
Pierce Dant Hamblin ..... North Carolina line.
Obadiah Hammon ..... North Carolina line.
John Payton Horton ..... Virginia line.
John Hubbs ..... South Carolina militia.
William McHargue ..... North Carolina militia.
Wade M. Woodson ..... North Carolina line.

LAUREL COUNTY.

Elijah Clark ..... Maryland militia.
John Evans ..... Virginia militia.
James French ..... New York line.
John Forbes ..... North Carolina line.
John Freeman ..... Virginia militia.
Solomon Stansbury ..... North Carolina line.
John Simpson ..... North Carolina line.

LAWRENCE COUNTY.

William Brown ..... Virginia line.
Gilbert Blumer ..... New York militia.
William Cox ..... Virginia militia.
Bazle Castle ..... Virginia line.
Adam Crum ..... North Carolina line.
Joseph Davis ..... Virginia line.
George Hardwick ..... Virginia line.
William Lyon ..... North Carolina line.
Samuel Lee ..... Virginia militia.
John Lastey ..... Virginia line.
Josiah Marcum ..... Virginia militia.
John Marshall ..... Virginia line.
James Norton ..... Virginia militia.
James Pratt ..... Virginia line.
George Parkins ..... North Carolina militia.
John Sexton ..... South Carolina line.
James Ward ..... Virginia line.

MORGAN COUNTY.

John Butler ..... Virginia line.
James Blevin ..... Virginia line.
George Barker ..... Virginia line.
John Cooper ..... Pennsylvania militia.
William Cooke ..... South Carolina line.
John Day ..... Virginia line.
David Ellington ..... Virginia militia.
Thomas Hamilton ..... Virginia line.
William Howerton ..... Virginia line.
Benjamin Hamilton ..... Virginia line.
Jacob Johnson ..... South Carolina line.
Isaac Keeton ..... North Carolina line.
Samuel Kelly ..... North Carolina militia.
Thomas Lewis ..... Virginia line.
Isaac McKinzee ..... Virginia militia.
John McGuire ..... Virginia line.
Reuben Ratliff ..... Virginia militia.

MORGAN COUNTY—Continued.

John Smethers ..... Virginia line.
Gilbert Stevens ..... Virginia militia.
Levi Swanson ..... Virginia militia.
Philip Williams ..... Virginia line.
William Walsh ..... North Carolina militia.

PERRY COUNTY.

Andrew Burns ..... Virginia State troops.
Drury Bush ..... Virginia line.
Stephen Cordill ..... North Carolina line.
William Cornett ..... Virginia line.
James Cordill ..... North Carolina line.
Achilles Craft ..... North Carolina line.
Peter Hammond ..... North Carolina line.
William Hagins ..... North Carolina line.
Henry Hurst ..... Virginia line.
James Howard ..... Virginia line.
Thomas Howard ..... Virginia line.
Andrew Harwell ..... Virginia line.
Samuel Stidham ..... North Carolina militia.
Roger Turner ..... North Carolina militia.
Thomas Watkins ..... North Carolina line.

PIKE COUNTY.

James Adkinson ..... Virginia line.
Joseph Ford ..... North Carolina line.
James Jackson ..... North Carolina line.
Moses Stipp ..... South Carolina line.

PULASKI COUNTY.

Robert Anderson ..... Virginia line.
Samuel Allen, Sen. ..... Virginia militia.
Michael Burter ..... Virginia State troops.
William Barron ..... N. Carolina State troops.
Henry Baugh ..... North Carolina militia.
John Barker ..... Virginia line.

PULASKI COUNTY—Continued.

John Barron ..... Virginia militia.
Lovel H. Dogan ..... Virginia State troops.
John Evans ..... New Jersey line.
Josiah Earp ..... Virginia militia.
Richard Goggin ..... Virginia militia.
James Hamilton ..... Virginia line.
William Hays ..... Virginia militia.
James Horrell ..... Virginia militia.
Moses Martin ..... North Carolina militia.
Barnabas Murray ..... North Carolina militia.
Joseph McAlister ..... Pennsylvania militia.
Samuel Newell, Sen. ..... Virginia militia.
John Newby ..... Virginia line.
William Owens ..... Virginia militia.
David Roper ..... Virginia line.
William Swinney ..... North Carolina militia.
Martin Turpin ..... Virginia militia.
William Trimble ..... Virginia line.
Nathaniel Tomlinson ..... Virginia militia.
Peter Tarter ..... North Carolina line.
John Willson ..... Virginia line.

ROCKCASTLE COUNTY.

James Anderson ..... Pennsylvania line.
Humphrey Bates ..... North Carolina militia.
William Craig ..... Virginia militia.
William Cash ..... Virginia militia.
Elijah Denney ..... North Carolina line.
Micajah Frost ..... North Carolina militia.
Moses Faris ..... Virginia militia.
Richard Gentry ..... South Carolina line.
Thomas Gadd ..... Maryland militia.
Henry Haggard ..... Virginia militia.
Nicholas Houk ..... North Carolina militia.
George Harlew ..... Virginia line.
Thomas Johnson ..... Virginia militia.

ROCKCASTLE COUNTY—Continued.

William Lawrence ..... Virginia militia.
George Proctor ..... Virginia militia.
Reuben Pew ..... New Jersey line.
Henry Pumphrey ..... Virginia State troops.
Mourning Roberts ..... Virginia militia.
Jesse Scott ..... North Carolina militia.
William Taylor ..... Virginia militia.
Charles Woodall ..... Virginia militia.
Jesse Woodall ..... Maryland line.

WAYNE COUNTY.

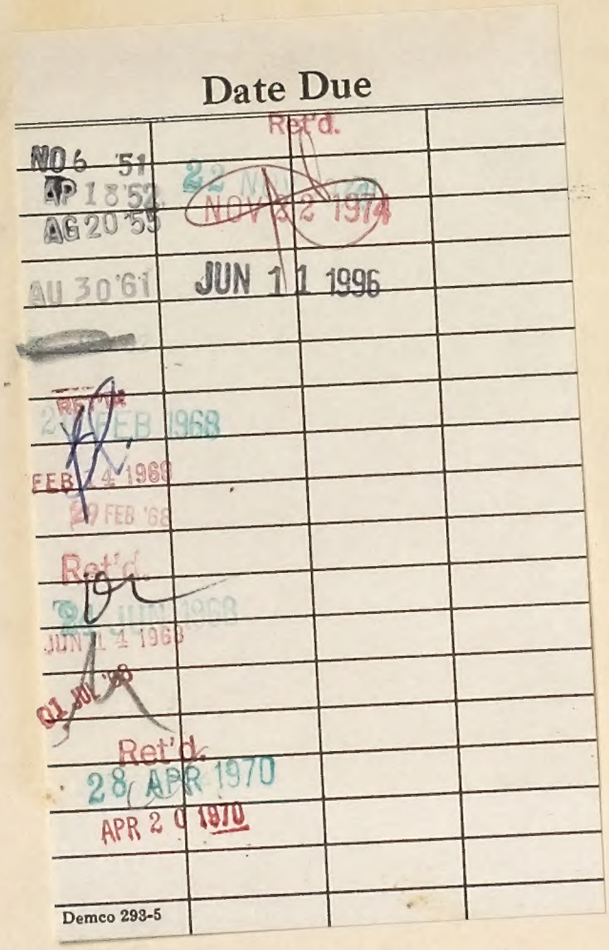
William Acre ..... North Carolina line.
John Adair ..... North Carolina line.
Robert Bleakly ..... North Carolina line.
William Butrum ..... North Carolina militia.
James Brown ..... North Carolina line.
George Bruton ..... South Carolina militia.
Robert Covington ..... Virginia militia.
Frederick Cooper ..... Pennsylvania militia.
William Carpenter ..... Virginia militia.
Reuben Coffey ..... N. Carolina State troops.
Patrick Coyle ..... Virginia line.
Peter Catron ..... Virginia militia.
John Davis ..... Virginia line.
George Decker ..... Virginia line.
Mastin Durham ..... North Carolina militia.
George Dabney ..... Virginia militia.
Rody Daffron ..... North Carolina militia.
Abraham Hunt ..... Virginia line.
Conrad Henegan ..... North Carolina line.
William Johnson, 2nd ..... Virginia line.
James Jones ..... Virginia line.
William Keath ..... Virginia line.
Thomas Merritt ..... North Carolina line.
Frederick Miller ..... Virginia militia.
Dudley Moreland ..... Virginia militia.

WAYNE COUNTY—Continued.

John Majors ..... North Carolina line.
James McHenry ..... N. Carolina State troops.
James C. McGee ..... Pennsylvania line.
Stephen Pratt ..... Virginia militia.
James Pierce ..... Virginia militia.
Jesse Powers ..... Virginia line.
George Rogers ..... Virginia militia.
Isaac Stephens ..... Virginia line.
Zachariah Sanders ..... Virginia militia.
Elisha Thomas ..... Virginia line.
James Turner ..... Virginia line.
John Walters ..... North Carolina line.
Charles Warham ..... Virginia line.
James Woody ..... North Carolina militia.

WHITLEY COUNTY.

John Anderson ..... North Carolina line.
Charles Gatliff ..... Virginia militia.
John Hood ..... North Carolina line.
Thomas Laughlin ..... North Carolina line.
Joshua Moses ..... North Carolina militia.
James Mahan ..... Virginia militia.
Henry Porch ..... North Carolina militia.
William Rose ..... North Carolina line.


Date Due
Ret'd.
NOV 6 '51
AP 18'52
AG 20'55
NOV 12 1974
AU 30'61
JUN 11 1996
FEB 1968
FEB 4 1968
Ret'd.
JUN 4 1968
Ret'd.
28 APR 1970
APR 2 0 1970
Demco 293-5

42938

APR 30 '40
MAY 9 '40
MAR 25 '42
OCT 30 '47
APR 21 '48
JE 1 '49

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